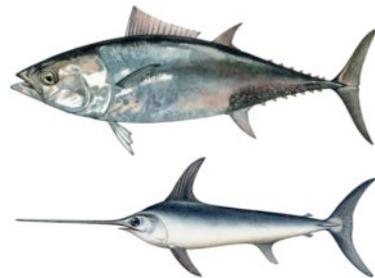


# URGENT CALL



FOR THE CONSERVATION OF  
ONE OF THE LAST STRONGHOLDS  
OF THE ENDANGERED  
MEDITERRANEAN COMMON DOLPHIN

FOR THE CONSERVATION OF TUNA  
AND OTHER MARINE MEGAFUNA



TO PRESERVE VIABLE FISH STOCKS  
AND PROTECT SPAWNING GROUNDS



TO PRESERVE MARINE BIODIVERSITY  
AND THE ECOSYSTEM SERVICES  
IT PROVIDES



AND FOR THE SUSTAINABILITY OF  
FISHERIES IN A NATURA 2000 SITE



## This call is made by

	Alnitak Marine Research Centre	Spain
	Blue World Institute of Marine Research and Conservation	Croatia
	Cetacean Alliance	Supranational
	CIRCE Conservation Information and Research on Cetaceans	Spain
	Delphis Mediterranean Dolphin Conservation	Italy
	MOm Hellenic Society for the Protection of the Monk Seal	<b>Greece</b>
	Morigenos Marine Mammal Research and Conservation Society	Slovenia
	Oceana	Supranational
	OceanCare	Switzerland
	Pelagos Cetacean Research Institute	<b>Greece</b>
	Tethys Research Institute	Italy
	WDCS The Whale and Dolphin Conservation Society	Supranational
	WWF Greece	<b>Greece</b>

This call for action is consistent with the recommendations to preserve marine biodiversity made in UNEP's Mediterranean Action Plan, and with the strong calls for the conservation of Mediterranean common dolphins made by the Parties to the UNEP/CMS Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS), also ratified by Greece.



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### **This call is endorsed by the following experts**

#### **Giuseppe Notarbartolo di Sciara, Ph.D.**

Chair, Scientific Committee of ACCOBAMS (UNEP/CMS Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area)

Regional Coordinator for the Mediterranean, IUCN World Commission on Protected Areas - Marine

#### **Randall R. Reeves, Ph.D.**

Chair, IUCN Cetacean Specialist Group - Species Survival Commission

### **Synthesis**

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Scientific research documented ecosystem damage caused by overfishing in the Greek waters east of Lefkada and around the island of Kalamos - a Natura 2000 area.

This resulted in ecosystem collapse and decline of marine megafauna including formerly abundant short-beaked common dolphins.

Local and regional non-governmental organisations have joined forces to call for urgent fisheries management action that may result in ecosystem recovery, protect biodiversity, preserve fish stocks, and ensure the sustainability of fisheries in the area.

## The Mediterranean common dolphin

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Once one of the most common cetacean species in the Mediterranean, the short-beaked common dolphin (*Delphinus delphis*) has declined throughout the region during the last 30-40 years. The causes remain poorly understood but are thought to include prey depletion caused by overfishing, bycatch in fishing gear and habitat degradation.

Determining the conservation status of Mediterranean common dolphins was cited as a priority in past cetacean action plans of the IUCN Species Survival Commission (Perrin 1988, Reeves & Leatherwood 1994). The 2000-2010 IUCN Action Plan for the world's cetaceans noted that common dolphins had declined dramatically in the central and eastern Mediterranean and stressed that conservation action was urgently needed to prevent extirpation in this portion of the species' range (Reeves *et al.* 2003).

- ◆ In **2003** the Mediterranean population of common dolphins was classified as **Endangered** in the IUCN Red List of Threatened Animals.
- ◆ In **2004**, ACCOBAMS presented a comprehensive 90-page Conservation Plan for Mediterranean common dolphins. The Plan was "strongly welcomed" by the 2nd Meeting of the Parties of ACCOBAMS (Resolution 2.20).
- ◆ In **2005**, the Mediterranean population of common dolphins was included in **Appendix I and II** of the Convention on the Conservation of Migratory Species (Bonn Convention - CMS). The population was already included in Appendix II but the listing - formerly limited to a "western Mediterranean population" - was extended to the whole Mediterranean population of common dolphins.
- ◆ Also in **2005**, the Scientific Committee of ACCOBAMS recommended immediate financial and institutional support to small-scale projects for common dolphin conservation.
- ◆ In **2007**, the 3rd Meeting of the Parties to ACCOBAMS was "deeply concerned that despite the strong scientific evidence, strategic planning and multiple expressions of concern and recommendations, *inter alia* by the ACCOBAMS Scientific Committee and relevant ACCOBAMS Partners, **insufficient action has been taken to ensure recovery of the common dolphin in the region**". The Parties were therefore urged to implement the conservation plan for common dolphins and introduce relevant activities into their national action plans. The Secretariat of ACCOBAMS was requested to convey the international concern for common dolphins to the environment and fisheries directorates of the European Commission, in particular for the **inclusion of the common dolphin in Annex 2 to the Habitat Directive** (Resolution 3.17).

## The decline of common dolphins and other marine megafauna east of Lefkada, Greece

The waters east of Lefkada, western Greece - a Natura 2000 Site of Community Importance - are one of the last places where common dolphins can be found in the central Mediterranean Sea.

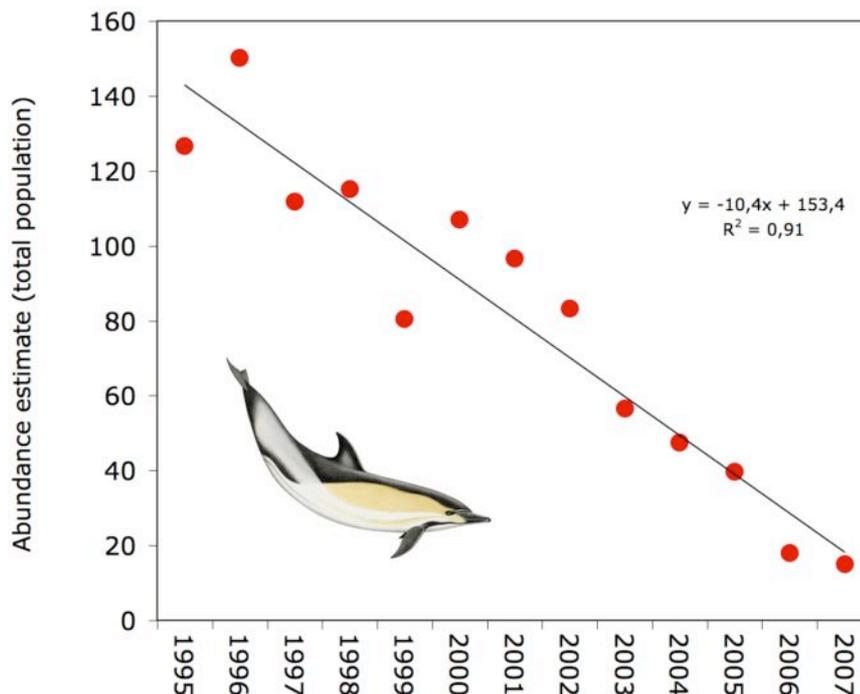
In 2002 ACCOBAMS recognised that pilot conservation and management actions should be developed and implemented immediately to preserve common dolphin habitat in this area. In the Conservation Plan for Mediterranean common dolphins (ACCOBAMS, 2004), the waters east of Lefkada and around Kalamos were identified as **area of high conservation importance**.

The significance of protecting common dolphins east of Lefkada and around Kalamos was also highlighted in the IUCN 2002-2010 Conservation Action Plan for the World's cetaceans.

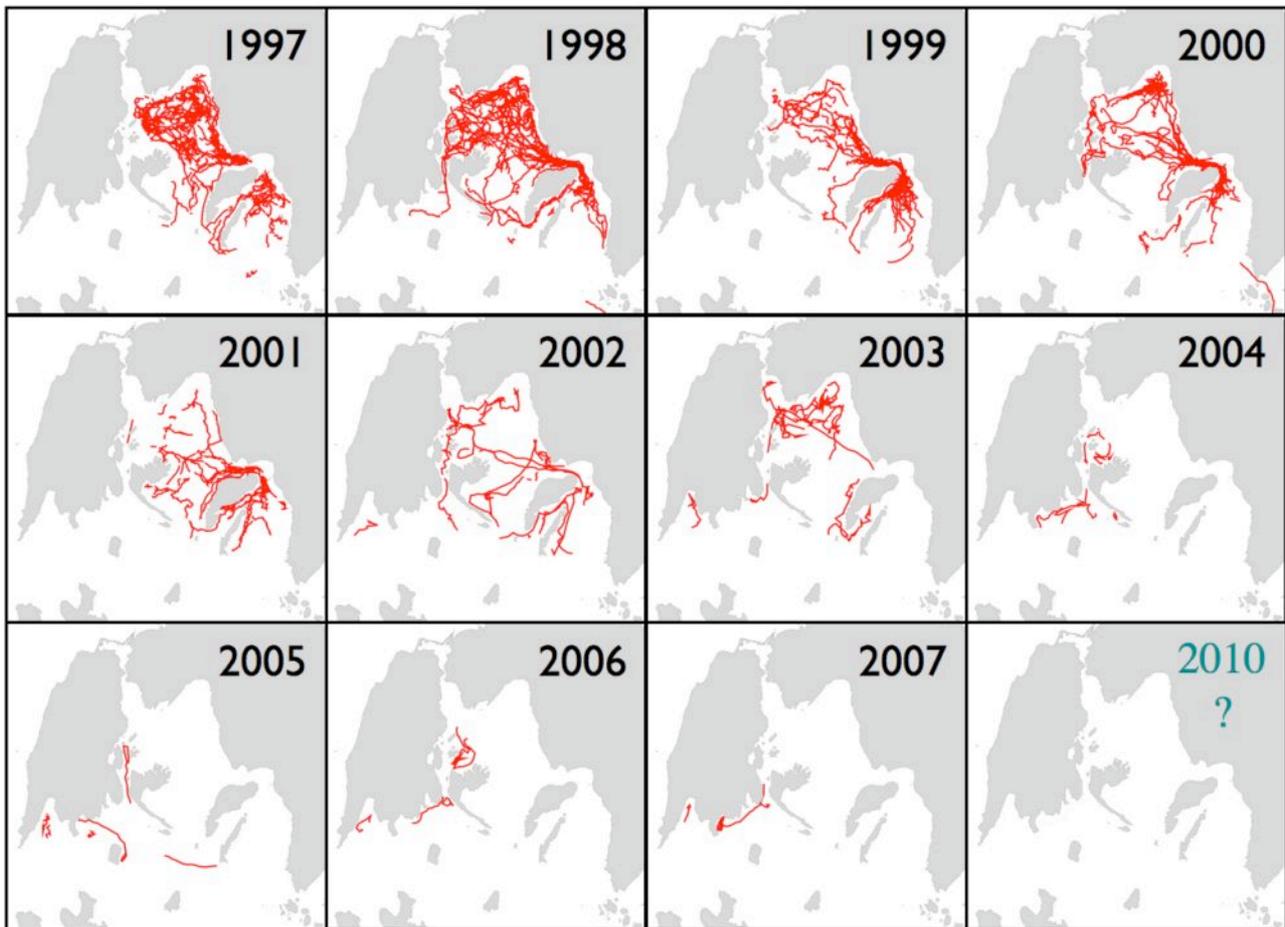
Notwithstanding these designations, **the immediate risk of complete eradication** from the area of common dolphins was documented by intensive research.

Common dolphin numbers decreased from **150** to only **15** animals in ten years.

Abundance trend of common dolphins east of Lefkada and around the island of Kalamos in 1995-2007:



Occurrence of common dolphins east of Lefkada and around the island of Kalamos in 1997-2007 (red lines<sup>1</sup>) indicate the extent of the decline:



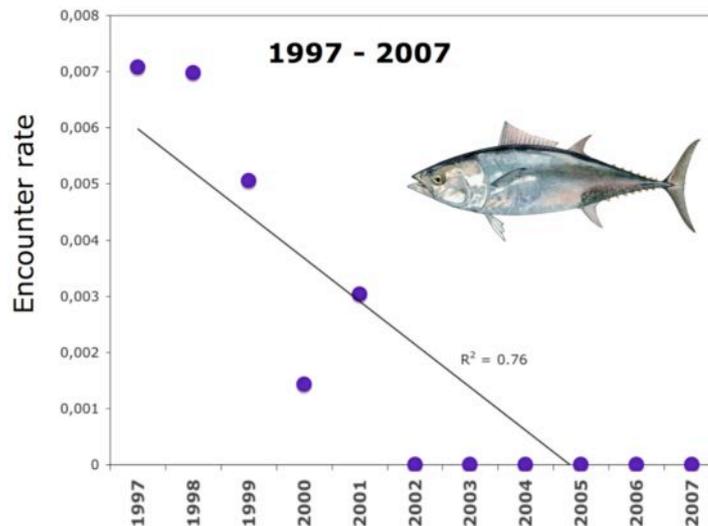
The observed negative trends are not considered a consequence of emigration or long-range movements of common dolphins. This area has been one of the few remaining pockets of high-density occurrence in the central and eastern Mediterranean, and there are virtually no reports of common dolphins in surrounding areas, notwithstanding substantial dedicated effort by several research groups, totalling tens of thousands of kilometres and covering large portions of the eastern Ionian Sea, as well as waters west of the Peloponnese. Common dolphins appear to be rare in, or absent from, the adjacent central Mediterranean areas explored so far, including the Hellenic Trench, other neritic and pelagic portions of the Ionian Sea, and the Adriatic Sea, the only exception being the inner Gulf of Corinth where a few common dolphins remain.



Research indicates a high risk of local disappearance of common dolphins in the very near future unless fishery management measures are implemented immediately.

<sup>1</sup> GPS tracks of research vessels closely following common dolphin groups are shown as a proxy of common dolphin relative abundance in the area. Effort was uniformly distributed throughout the time of the study.

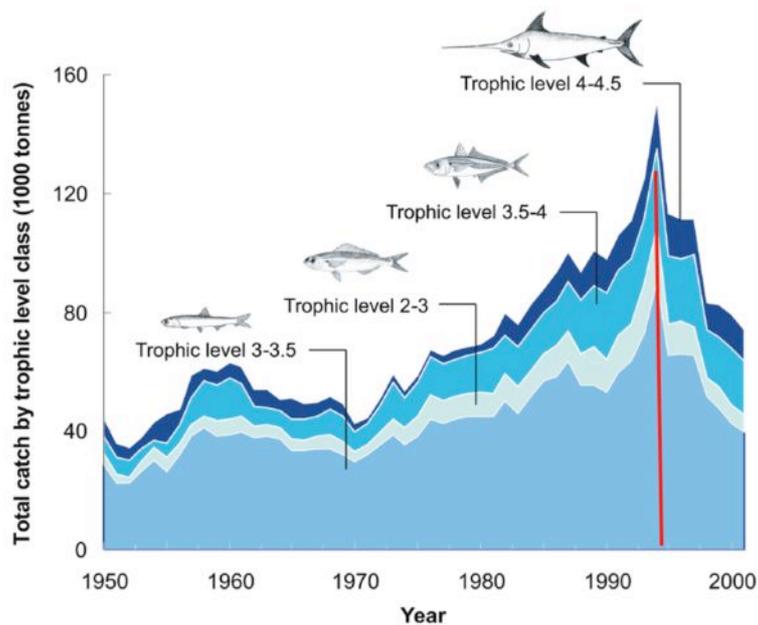
Sightings of large tuna also declined dramatically east of Lefkada and around Kalamos:



### Why did common dolphins and tuna decline ?

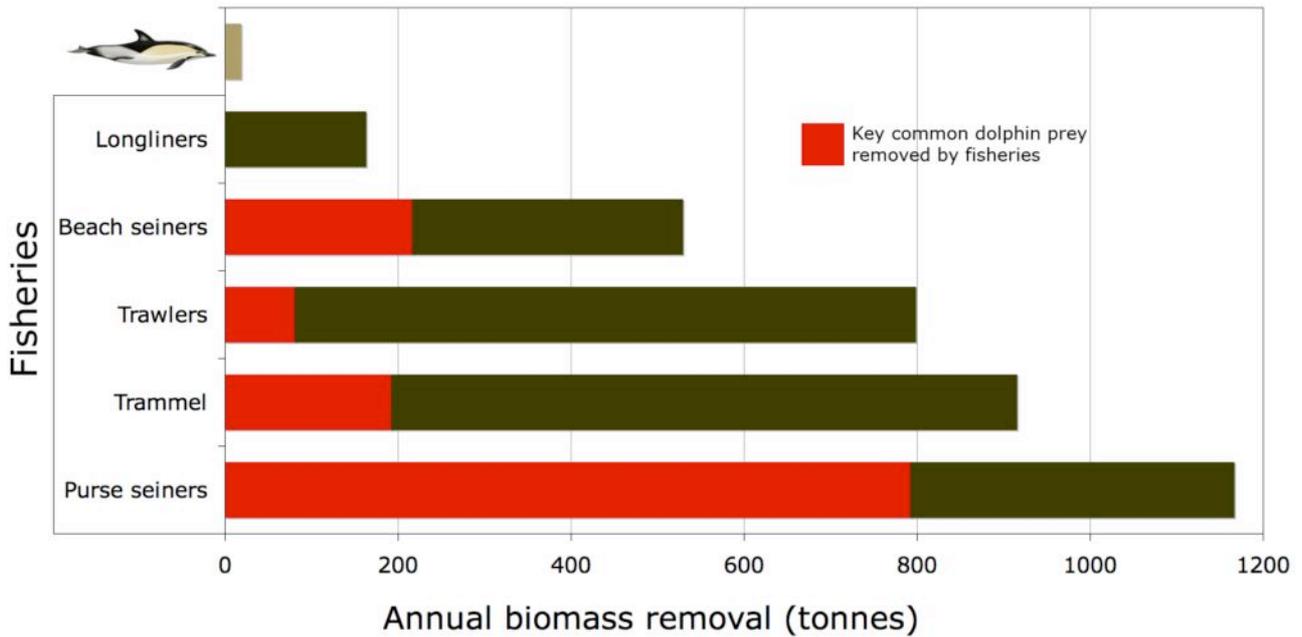
Evidence shows that the decline of common dolphins and tuna was caused primarily by **prey depletion** resulting from **overfishing**. The impact of fishing on the local ecosystem has been tremendous and resulted in significant ecosystem damage and loss of biodiversity.

Fishery landings in Greece increased until 1994 due to the fleet modernisation and geographic expansion of the fisheries over this period. However, **declining trends since the mid 1990s** suggest that such effects have ceased and fisheries have become **unsustainable** (Papathanassiou & Zenetos 2005, Stergiou *et al.* 2007a,b).



Ecosystem services have been seriously compromised by overfishing, and the sustainability of fisheries is now at stake.

Total fish biomass removed by common dolphins and by fisheries east of Lefkada and around Kalamos in 2007. The red part of the fisheries bars shows removal of species representing key prey for common dolphins, as well as for other top predators such as tuna and swordfish.



Most of the impact is caused by a relatively **small number of industrial boats**, particularly **purse seiners**. Trawlers and beach seiners are also relatively few, but are known to cause significant ecosystem damage.

Composition of the fishing fleet and number of boats operating east of Lefkada and around Kalamos:

Boat kind	Mean number of active boats	Total fleet
<b>Purse seiners</b> (12-25m)	<b>10</b>	<b>12</b>
<b>Beach seiners</b> (8-12m)	24	24
<b>Trawlers</b> (20-25m)	<b>7</b>	<b>9</b>
<b>Trammel boats</b> (4-12m)	<b>175</b>	<b>213</b>
<b>Longliners</b> (5-10m)	31	50

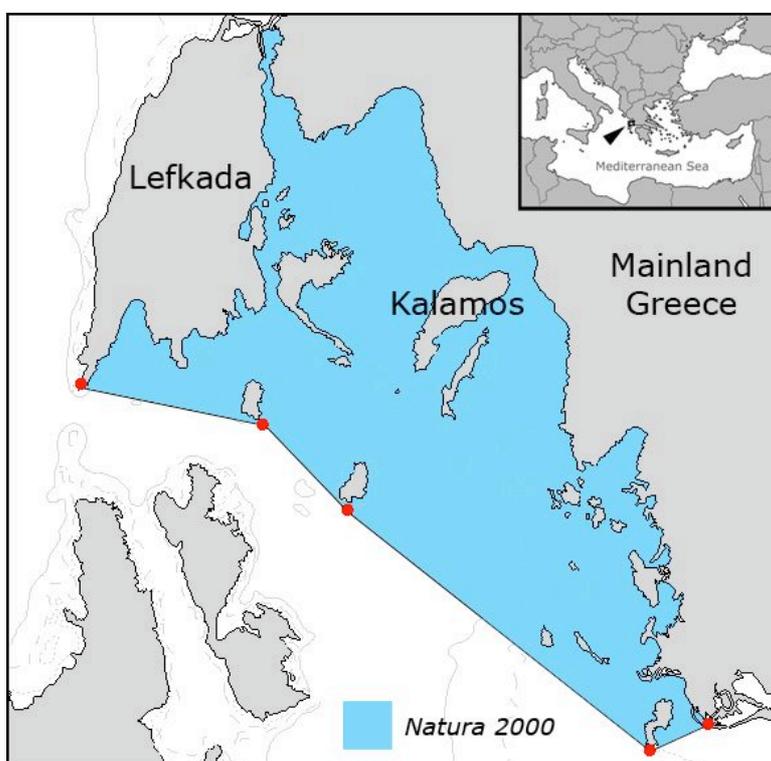
## Conservation needs

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The waters east of Lefkada and around Kalamos are an important **spawning area** for epipelagic schooling fish (Somarakis *et al.* 2000, 2006a,b) and a **nursery area** for hake (Politou *et al.* 2006), making this **Natura 2000** Site of Community Importance a candidate for special protection based on EC Regulations for the sustainable exploitation of fishery resources in the Mediterranean.

In addition to common dolphins, the area is home to a resident community of **bottlenose dolphins** *Tursiops truncatus*. Endangered species such as **monk seals** *Monachus monachus* and loggerhead **sea turtles** *Caretta caretta* are also regularly sighted. All these species are included in Annex II to the **Habitats Directive**.

Fishery management measures are needed to reduce current over-exploitation, protect the local biodiversity, ensure continued ecosystem services, achieve sustainability, and allow for the recovery of endangered marine megafauna.



The **Natura 2000 site GR2220003**<sup>2</sup> in the Administrative Region of Ionia Nisia, Prefecture of Kefallinia.

*“The geomorphology of these islands coasts create various habitats for the marine and also terrestrial flora and fauna. In the sheltered waters of the archipelago, important marine predator species on the top of the food chain are resident or common, indicating the biological richness of the area.”* (From “Natura 2000 in Hellas” <http://www.minenv.gr/1/12/121/12103/viotopoi/e2220003.html>)

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<sup>2</sup> Commission Decision of 19 July 2006 adopting, pursuant to Council Directive 92/43/EEC, the list of sites of Community importance for the Mediterranean biogeographical region (notified under document number C(2006) 3261) (2006/613/EC). Official Journal of the European Union L 259/1 of 21.9.2006.

## What should be done

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With reference to **Council Regulation (EC) No 1967/2006**<sup>3</sup> concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea

and considering that **fisheries management measures within "Natura 2000 sites" are possible under the Common Fisheries Policy**

we recommend that the following urgent action is taken **within this Natura 2000 Site**:

- 1) Strict enforcement of national legislation and of Council Regulation 1967/2006, and appropriate penalties for illegal fishing.
- 2) Immediate temporal restrictions on purse seining and trawling, to ensure that these fisheries are fully sustainable and do not harm the ecosystem and its biodiversity, as well as endangered dolphin populations (either directly or indirectly). In addition to existing regulations, purse seining should only be allowed from May to October, trawling from November to March.
- 3) Prompt implementation of the ban of beach seining by May 31st, 2010, as demanded by Council Regulation 1967/2006. Beach seining is known to devastate ecosystems and has been banned in most EU Countries.
- 4) Adoption of larger mesh size for all bottom-set nets than what is being used by coastal fishermen (current practice is 20-22 mm knot-to-knot minimum), in order to increase selectivity.
- 5) Current fishing capacity in the Natura 2000 area should not increase.
- 6) Restrictions on recreational fishing, which should be carefully regulated to minimise impact on the ecosystem, according to the available scientific evidence.

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<sup>3</sup> Council Regulation (EC) No 1967/2006 of 21 December 2006, amending Regulation (EEC) No 2847/93 and repealing Regulation (EC) No 1626/94, as well as to its Corrigendum (Official Journal of the European Union L 409 of 30 December 2006).

## Challenges to implementation, and benefits of management action

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**Fisheries management measures within "Natura 2000 sites" are possible under the Common Fisheries Policy (CFP).** Member States can take non-discriminatory measures to minimise the effects of fishing on the conservation of the marine ecosystem within 12 nautical miles of their coast (6 nautical miles in the case of Greece).

The ban of beach seining by May 31st, 2010, demanded by Council Regulation 1967/2006 is unlikely to cause major social or economic problems, as the beach seining season is already limited to six months. During the rest of the year beach seiners routinely fish with trammel nets. Enforcement of the ban would therefore result in these boats (N=24) fishing with trammel nets year-round.

To prevent more ecosystem damage and loss of marine biodiversity, and waiting for the design of long-term management measures, the Greek Authorities could adopt Emergency Measures in the framework of EC Regulation 2371/2002 (Articles 7 and 8). Emergency Measures could also be adopted through Presidential Decrees or Ministerial Decisions (legislative framework described in Law 420/70, as modified by Law 1740/87).

**In the framework of the European Fisheries Fund (Regulation 1198/2006) there are options such as the financing of measures including the temporal closure of certain fisheries or increase of gear selectivity.** These measures may be adopted if the Greek Government proposes them in its National Operating Plan for Fisheries.

Alternative opportunities and/or compensations may be offered to fishermen who are forced to leave their jobs. An option that needs to be considered is that of coastal fishing tourism, which would require an adjustment of relevant legislation.

In addition, the mapping and conservation of Posidonia beds, coralligenous habitat and maerl beds as provided by Council Regulation 1967/2006 is of utmost importance.

Consequently, this may be a "win-win" situation and also an opportunity to show a positive example of how EC Regulations can be effectively implemented to solve a specific and well-documented conservation and socio-economic problem.



Benefits of the management actions proposed here include:

- 1) **The sustainability of fisheries**
- 2) **The protection of an important fish spawning area**
- 3) **Ecosystem recovery**
- 4) **Increased biodiversity and ecosystem services**
- 5) **Increased aesthetic and cultural value of the area**
- 6) **Increased opportunities for sustainable nature tourism, such as coastal fishing tourism.**

## About the Natura 2000 network in the marine environment

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(Adapted from: [http://ec.europa.eu/fisheries/cfp/management\\_resources/environment/natura\\_2000\\_en.htm](http://ec.europa.eu/fisheries/cfp/management_resources/environment/natura_2000_en.htm))

Natura 2000 is a Community-wide network of nature protection areas established under the Habitats Directive (92/43/EEC) and Birds Directive 79/409/EEC. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats.

The responsibility for proposing sites for Natura 2000 lies with the Member States.

Natura 2000 marine areas will not necessarily be "no take zones", but zones where sustainable use of resources in an environmental friendly way is needed. For this reason they may require specific fishery management measures for the purpose of conservation of those species and habitats for which the site has been designated. Fisheries management measures in those areas should be decided in the context of the Common Fisheries Policy taking into account the principles of proportionality and non-discrimination.

Details on the establishment of a marine network of conservation areas under Natura 2000 can be found in the Guidelines for the establishment of the Natura 2000 network in the marine environment. Application of the Habitats and Birds Directives.

The guidance document Introducing fisheries measures for marine Natura 2000 sites aims at facilitating the tasks of the Member State authorities and stakeholders when preparing and requesting fisheries management measures under the Common Fisheries Policy.



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<http://www.cetaceanalliance.org/call/>