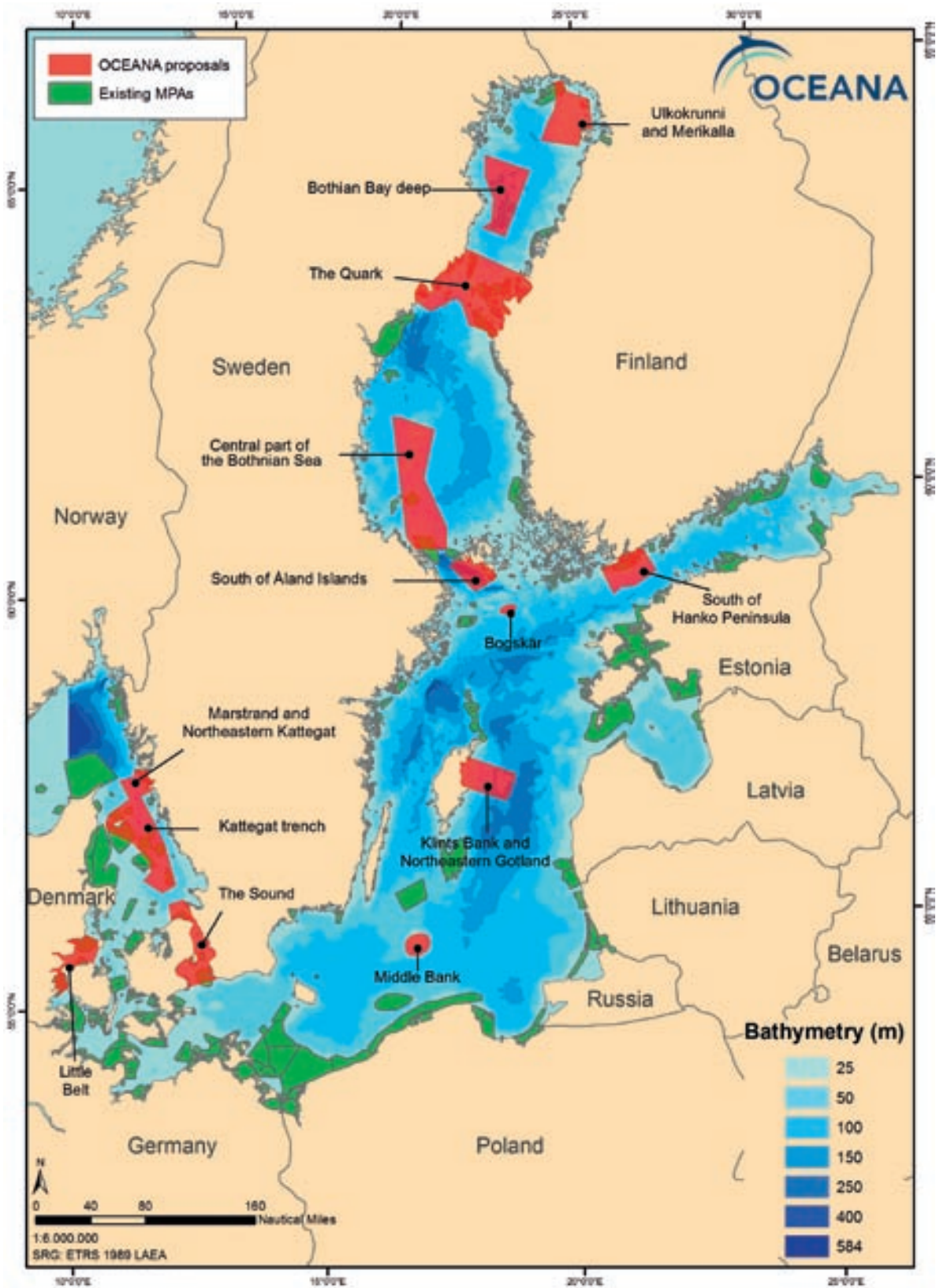


Oceana proposals for Baltic Sea and Kattegat



Existing Natura 2000 areas and Oceana's proposals for new and/or enlarged Marine Protected Areas.

INTRODUCTION

Several scientific studies provide proof of the successes of Marine Protected Areas (MPAs) in enhancing biodiversity and benefiting sea life and habitats (e.g. FAO 2012 and references therein). MPAs provide species and habitats a place to rebuild and flourish; and they are also needed to maintain and restore (when possible) the damaged ecosystems. The areas set aside need to be large enough to minimize human caused stress factors as much as possible. For example, areas facing reduced pressure, where fisheries have been banned or restricted, have healthier communities and often host fish that are significantly bigger and more plentiful than in the areas outside reserves. As fish get bigger in a protected area, productivity increases and creates a spillover effect (of larvae and fish) into surrounding areas leading to bigger catches in these neighboring areas.

When properly managed, the Marine Protected Areas aid in:

- Conservation of biodiversity, including protection of rare, scarce and threatened species, communities and habitats.
- Protection a specific life history stage, for instance MPAs can promote increased fish stocks by providing refugia for fish eggs and larvae and improve recruitment.
- Maintaining the value of diverse communities in providing resistance and resilience to change in marine communities. This helps communities buffer against adverse effects, like climate change.
- Protection and maintenance of ‘ecosystem goods and services’ that biodiversity provides and on which humans are very much dependent.
- Reducing fisheries bycatch, discards and other negative impacts on target and non-target species.
- MPAs can also aid in dealing with threats. In the Baltic Sea these include eutrophication and pollution by hazardous substances, physical disturbance by destructive fishing practices, dredging which reduces diversity in communities, alien species and climate change, the impacts of can be unexpected and irreversible on the ecosystems and their functions.

Marine Protected Areas vary in the type of protection schemes in place. In addition to the broad designation of MPAs, a recent study on the recovery of fish stocks suggests that about 10 to 20 % of marine waters should be nominated as ‘fish stock recovery areas’ (a type of MPA) to enable the recovery of commercially important species (European Parliament, 2012). Within these areas, fishing is prohibited to facilitate conservation and recovery of fish stocks. Some MPAs might allow the targeting of some resources depending on its conservation objectives. Larger MPAs may include different user zones and adjacent buffer areas.



Sea anemone (*Urticina felina*) on shallow water. Kattegat trench, Sweden. © OCEANA/ Carlos Minguell

POLICY FRAMEWORK AT THE INTERNATIONAL, EUROPEAN UNION AND BALTIC SEA REGIONAL LEVELS

There are several on-going political processes aimed to restore the status of the oceans across the world. The United Nations Convention on Biological Diversity (CBD) aims to conserve biological diversity by establishing a system of protected areas, (CBD, 2007). In 2010, the CBD adopted a Strategic Plan for Biodiversity 2011-2020, along with a series of ‘Aichi Targets’ which commit the signatory countries to protecting the areas in their territory that are the most biodiverse and those that are most crucial to protecting ecosystem services. Countries must ensure that by 2020 at least 10 % of their coastal and marine areas are conserved through a system of protected areas.



Nudibranch (*Tritonia hombergii*) and dead men's fingers (*Alcyonium digitatum*). Kattegat trench, Denmark.
© OCEANA/ Carlos Minguell



Flounder (*Platichthys flesus*) in the Baltic Proper, Sweden. © OCEANA/ Carlos Minguell

At the EU level, there are several directives that aim to protect biodiversity and sustain provision of ecosystem services. The Marine Strategy Framework Directive (MSFD¹) obliges Member States to achieve “Good Environmental Status” in their waters by 2020 using an integrated approach to improve ecosystem functioning and balance human activities with their impacts. Good Environmental Status means that the overall state of the environment in marine waters provides ecologically diverse and dynamic oceans and seas which are healthy and productive. Use of the marine environment must be kept at a sustainable level that safeguards potential uses and activities by current and future generations. This means the structure, functions and processes of marine ecosystems have to be fully considered, marine species and habitats must be protected and human-induced decline of biodiversity prevented.

The main legal obligations concerning the protection of species and habitats in the EU are provided in the Habitats Directive² in the form of the Natura 2000 network. This network aims to insure the long-term survival of Europe’s most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and Special Protection Areas (SPAs) designated by Member States under the Birds Directive³. A significant shortcoming of the Natura 2000 network is that it focuses on the protection of habitats and species that have community importance as listed in the Annexes of the Habitats Directive. However, the lists disregard several important marine features, particularly those from benthic communities that also need to be protected. The MSFD, though, offers better possibilities to overcome this weakness by requiring Member States to establish spatial protection measures, contributing to coherent and representative networks of marine protected areas in its Article 13. The MSFD is the first Community framework instrument aimed specifically at protecting and preserving the marine environment as a whole, and the first attempt by the EU to implement ecosystem-based management of human activities in the marine environment (Fleming-Lehtinen, 2011).

1 Anon. 2008

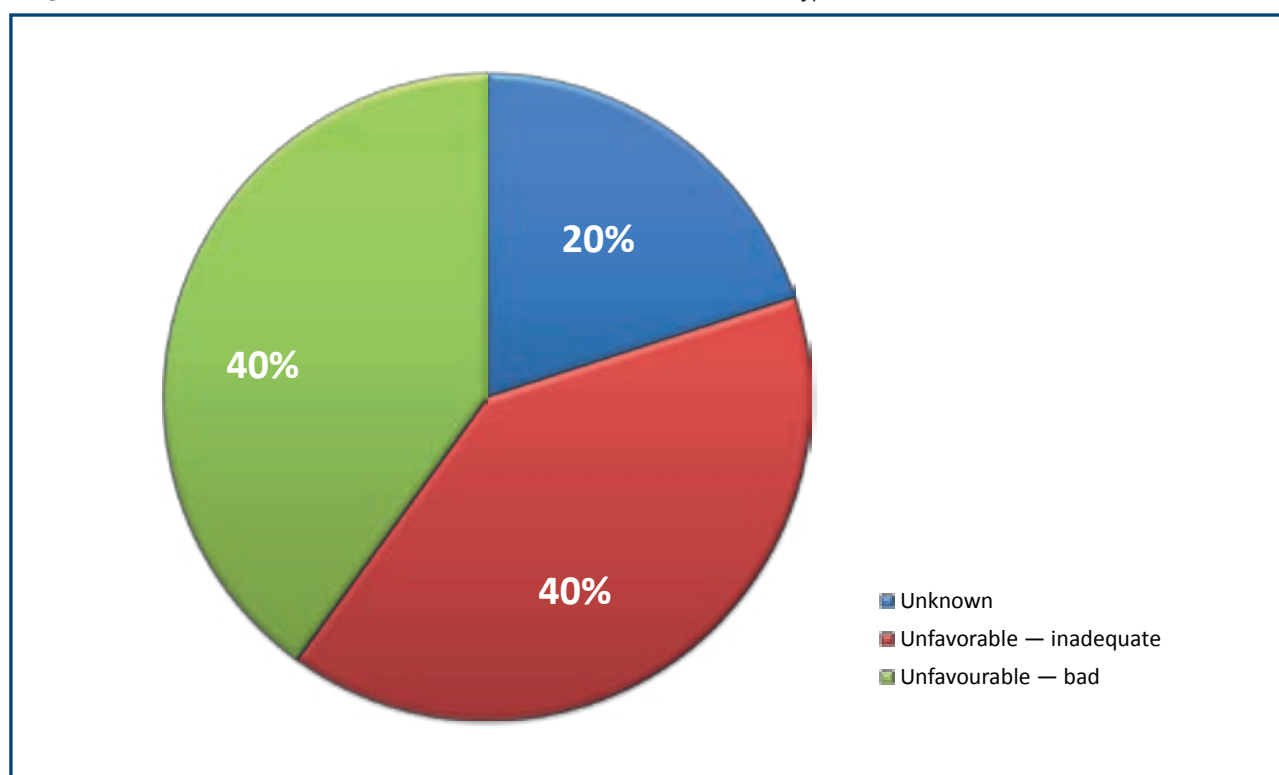
2 Anon. 1992

3 Anon. 1979

To implement the commitments stemming from the CBD, the European Commission adopted a 2020 Biodiversity Strategy in 2011. The strategy provides a long-term vision (2050) and short-term target (2020). By 2020 the loss of biodiversity and degradation of ecosystem services should be halted, and by 2050 biodiversity and its ecosystem services should be protected and restored so that catastrophic changes caused by the loss of biodiversity are avoided. In particular, one of the targets states that by 2020, 100 % more habitat assessments and 50 % more species assessments under the Habitats Directive should show a favorable or improved conservation status compared to current assessments.

A recent evaluation (EEA 2012) of the progress in designating Natura 2000 areas showed that there are large number of insufficiencies related to the conservation of species and habitats and coverage of the areas both in terrestrial and marine areas. In marine areas, most of the sites are within 12 nautical miles from the coast and only 10 % of the marine habitats and 2 % of marine species are in favorable status. In the Baltic Sea, no habitats have a favorable status (Figure 1). It was emphasized that there is a need to establish management plans for MPAs and to have joint efforts on EU fisheries issues, including on fisheries impact assessments. Reaching the 2020 deadline, which is only seven years away, will require the full implementation of all existing agreements at national, regional and global levels.

Figure 1. Conservation status of assessed Habitats Directive marine habitat types in the Baltic Sea. Data source: EEA 2012.

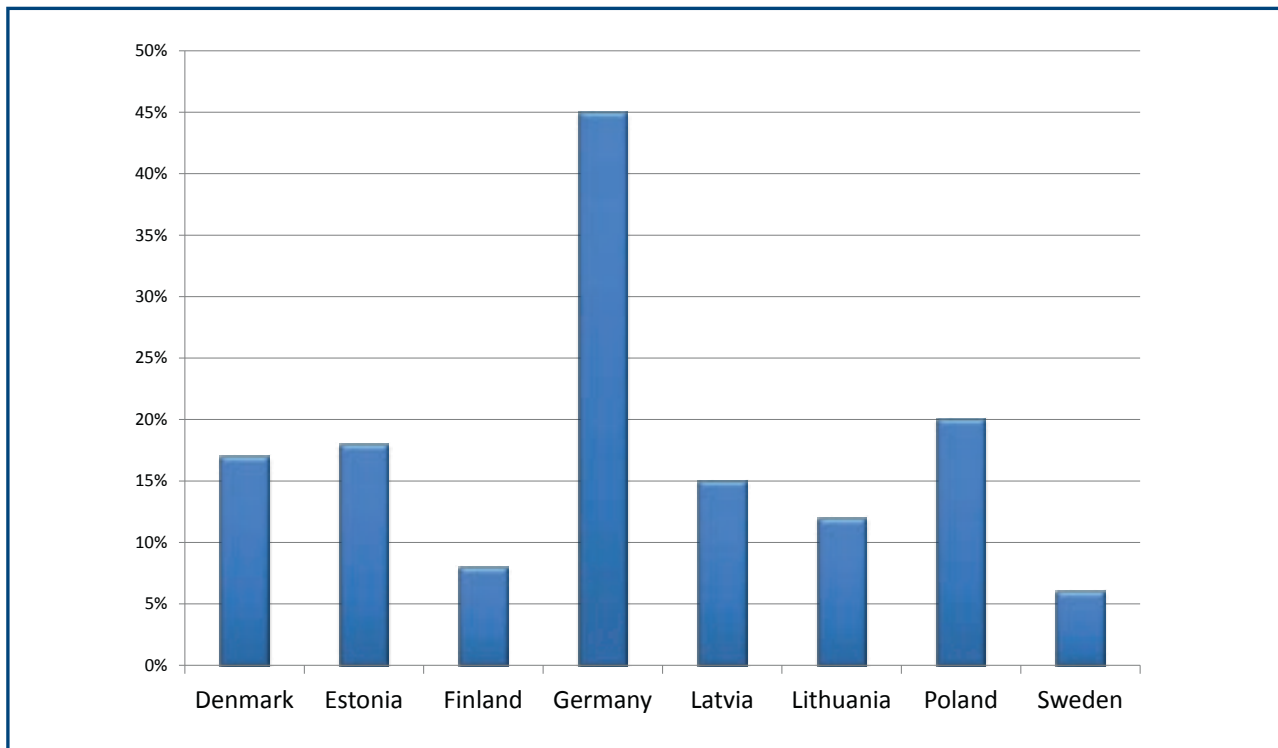


Regionally, the EU Baltic Sea Strategy (2009) aims to halt the loss of biodiversity and ecosystem services in the EU and Baltic Sea region, and restore them as fully as possible. The goals include actions on fish stocks, species, habitats and ecosystems. The Helsinki Convention HELCOM has worked to safeguard and restore the status of the Baltic Sea since 1974. In 2003, a joint ministerial decision with OSPAR (The Convention for the Protection of the marine Environment of the North-East Atlantic) was taken to create well-managed and ecologically coherent networks of Baltic Sea Protected Areas (BSPAs) and OSPAR marine protected areas by 2010. This commitment was reaffirmed in the HELCOM Baltic Sea Action Plan in 2007 signed by the Baltic Sea governments. The Action Plan aims to restore the good ecological status of the Baltic marine environment by 2021. The agreements taken also included the designation of new areas, especially in offshore waters and the improvement of the protection efficiency of the network.

However, in 2010 HELCOM concluded that despite some good developments, the current network of marine protected areas is lagging far behind its timetable, insufficient and cannot be considered as ecologically coherent. In fact, the existing network is disconnected, the sites are too small and there is not enough replication of protected features in the network to provide adequate protection. To safeguard the biodiversity and the ecological processes of the Baltic Sea over the long-term, there needs to be an immediate enlargement of the current network of marine protected areas, in terms of both quantity and quality (Liman et al. 2008, HELCOM 2010).

Today roughly 12 % of the Baltic Sea is protected with Natura 2000 areas (HELCOM 2010, EEA 2012, Figure 2) fulfilling the international 10 % conservation target set for world's marine regions. But, only about 5 % of the area outside Territorial Waters is protected leaving pelagic and deeper water species and habitats unprotected. Countries have contributed quite differently to this network, with Germany protecting about 45 % of its waters and Sweden only about 6 %.

Figure 2. Percentage of marine waters covered by Natura 2000 in the Baltic Sea. Data source: EEA 2012.



Common starfish (*Asterias rubens*) and yellow ringed sea squirts (*Ciona intestinalis*). Gothenburg archipelago, Kattegat, Sweden.
© OCEANA/ Carlos Minguell

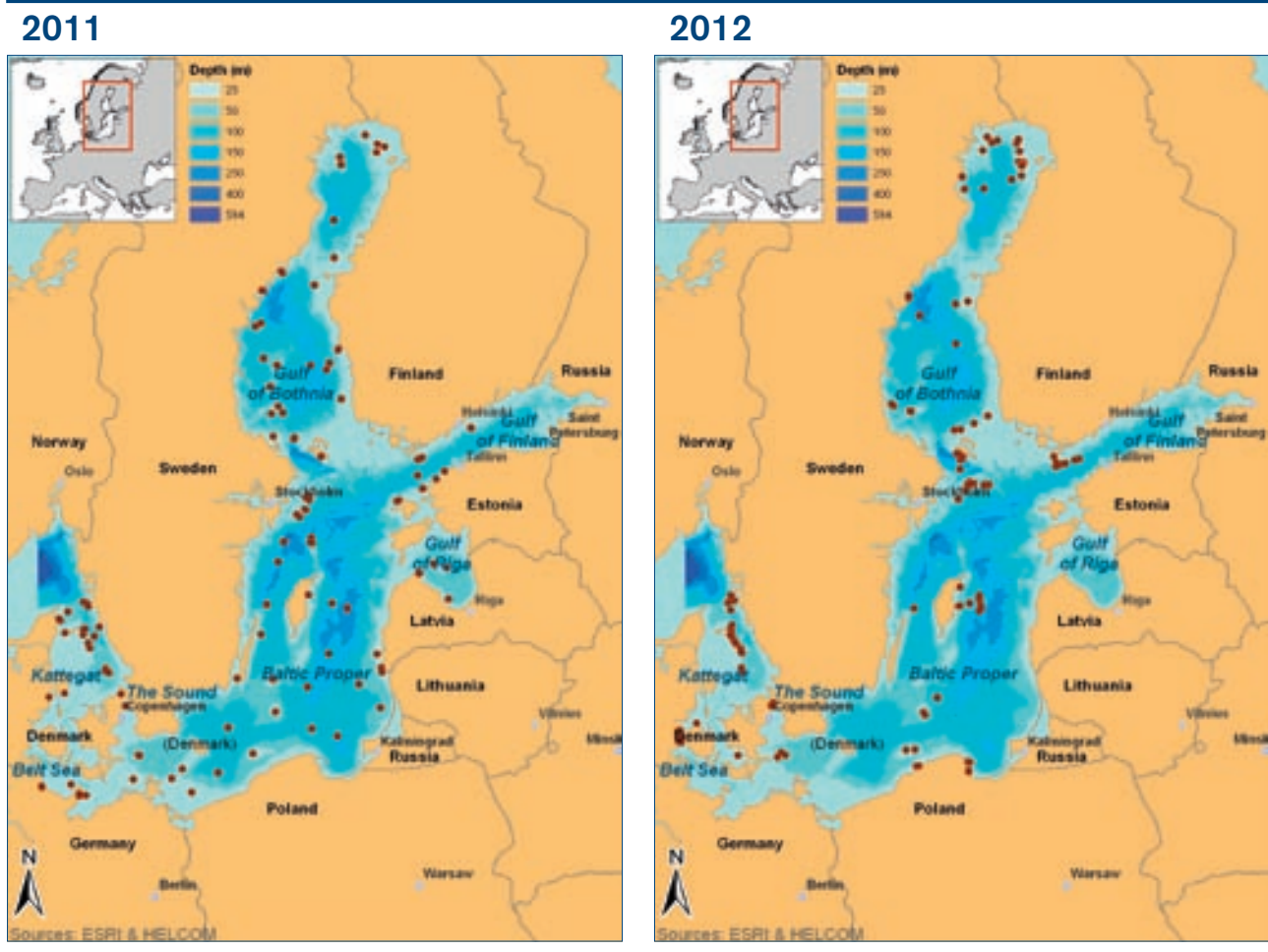
OCEANA'S PROPOSALS FOR MARINE PROTECTED AREAS IN THE BALTIC SEA AND KATTEGAT

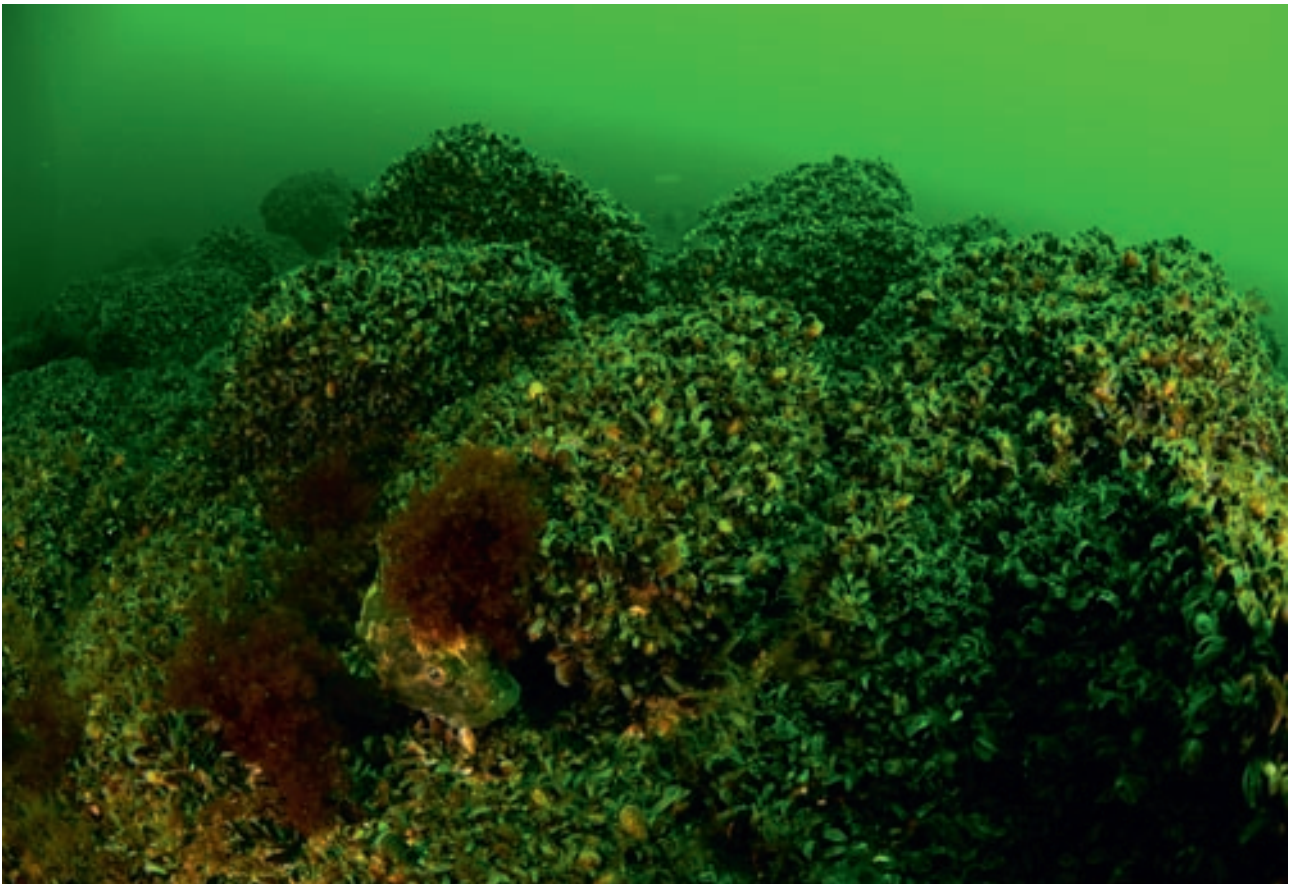
The political aspirations and necessary legislative tools are well in place in the Baltic Sea, but it is the implementation of the agreements that is lagging. **This folder includes fact sheets on areas Oceana is proposing for protection to aid in achieving the goals to maintain and restore the Baltic Sea biodiversity and create an ecologically coherent network of marine protected areas.**

Since 2011, when Oceana opened its new office in Copenhagen, we have conducted two at sea expeditions to gain in depth knowledge with which to further efforts on the conservation of the Baltic Sea and Kattegat. The two month research expeditions covered all of the sub-basins of the Baltic Sea area and Kattegat (Figure 3). The information collected consists altogether of over 200 ROV (Remotely Operated Vehicle) recordings, 70 scuba dives with video and photo material and over 80 sediment samples (with Van Veen grab). Over the course of the expeditions, Oceana documented benthic biodiversity and its status both inside designated marine protected areas and in areas not currently protected, some of which were identified as important marine habitats and ecosystems that deserve protection. Damage and threats, including trawling tracks, ghost nets and other trash were also documented.

Oceana's goal is to have 30 per cent of the Baltic Sea and Kattegat effectively conserved by a well-managed network of marine protected areas that also include essential fish habitats. The proposals included herein are based on information collected during the two expeditions in 2011 and 2012 (Figure 3) and from other sources, like national research institutions. Following the 2011 expedition, Oceana proposed areas for protection in "Conservation proposals for ecologically important areas in the Baltic Sea". During 2012, more information from these, and some additional areas, was collected and new, up-dated proposals are in progress.

Figure 3. Oceana's sampling points in 2011 and 2012.





Blue mussel bed (*Mytilus* sp.) in the inner Baltic Sea, Sweden. © OCEANA/ Carlos Suárez

The proposed areas include offshore sites in the Bothnian Bay, Kattegat and Baltic Proper, which are currently almost completely unprotected, deep water areas that still have healthy oxygen levels (Bothnian Bay Deep, Kattegat trench) and areas with high and distinctive biodiversity, including declining and threatened species (the Sound, Kattegat trench, Marstrandsskärgården, Little Belt). We have also proposed enlargements of some existing areas in order to have a full range of depths and ecosystems covered (Hanko Peninsula, Merikalla/ Ulkokrunni, Kattegat trench).

The full list of proposed areas is:

- Marstrandsskärgården, Kattegat, Sweden
- Kattegat trench, Denmark and Sweden
- Northern part of the Sound, Sweden and Denmark
- Little Belt, Denmark
- Klints Bank, Baltic Proper, Sweden
- Bogskär, Åland Islands, Finland
- South of Åland Islands, Finland
- South of Hanko Peninsula, Gulf of Finland, Finland
- Bothnian Bay Deep, Sweden
- Ulkokrunni and Merikalla, Bothnian Bay, Finland
- Middle Bank, Poland and Sweden
- Central part of the Bothnian Sea, Sweden

By protecting these areas, the overall percentage of protection in the Baltic Sea would raise from a bit over 12 % to about 20%, covering a total of 31,000 km² (Map on cover).

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