Proposal for Fisheries Conservation Measures in the Marine Protected Area, Bratten located in the Swedish EEZ of Skagerrak

Proposal for Fisheries Conservation Measures under article 11 and 18 of Regulation (EU) No 1380/2013 of The European Parliament and of the Council of 11 December 2013 on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) No 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC

1. Introduction

The marine protected area, Bratten, is a Natura 2000 site (SE0520189) and OSPAR MPA, and, is primarily located in the Swedish EEZ of Skagerrak. It is an area with species and habitats of high conservation value. The area was designated as a Natura 2000 site for reef structures (habitat code: H1170 - reefs and H1180 – submarine structures made of leaking gases) in 2011. The area is also part of OSPAR's network of marine protected areas. Several habitats and species included on OSPAR's list of threatened and/or declining species and habitats[1] are found in the area.

The area is furthermore an important fishing ground for Swedish and Danish fisheries. To some extent, the area is also used as a fishing ground by Norwegian fishermen.

Under the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, Sweden is obliged to ensure favourable conservation status of designated habitats and species within their Natura 2000 sites. In order to fulfil recommendations accepted under the OSPAR convention, Sweden is also responsible for the protection of designated OSPAR habitats and species. Sweden has therefore decided to incorporate, where necessary, the recommendations to protect the designated OSPAR habitats and species accepted under the OSPAR convention in the proposed measures in order to establish an ecologically representative network of marine protected areas in accordance with the Marine Strategy Framework Directive. See also 2.4 and 6.3.

The Swedish proposal on fisheries conservation measures, aiming at ensuring adequate protection of designated habitats and species of the Bratten area, is based on a proposal from the County Administrative Board of Västra Götaland, undertaken within an interreg project; Hav möter Land (Sea meets Land). The interreg project ran between 2010-2013 with the involvement of Sweden as lead partner, Norway and Denmark. The proposal has been developed in close collaboration with stakeholders. In Sweden, the County Administrative Boards are responsible for the management of the Natura 2000 sites, where the Swedish Agency for Marine and Water Management is the authority implementing the proposed fisheries measures. In general, the Government has the responsibility for conducting international negotiations within the Common Fisheries Policy framework. Through a Government assignment, the Swedish Agency for Marine and Water Management has been given a mandate from the Government to conduct the international negotiations on the basis of articles 11 and 18 in the Common Fisheries Policy with concerned Member States with the aim of formulating a joint recommendation for the Bratten area.

The proposal includes the establishment of no-take zones and compulsory use of AIS for all vessels fishing in the area.

2. Legal framework

2.1 Common Fisheries Policy

According to the Common Fisheries Policy (Regulation (EU) No 1380/2013 (The Basic Regulation)) Article 11, Member States are empowered to adopt conservation measures not affecting fishing vessels of other Member States that are applicable to waters under their sovereignty or jurisdiction and that are necessary to comply with their obligations under Article 13(4) of Directive 2008/56/EC, Article 4 of Directive 2009/147/EC or Article 6 of Directive 92/43/EEC.

[1] OSPAR ref. 2008-6

Where a Member State ("initiating Member State") considers that measures need to be adopted for the purpose of complying with the obligations referred to above, and other Member States have a direct management interest in the fishery to be affected by such measures, the European Commission shall be empowered to adopt such measures, upon request, by means of delegated acts. For this purpose cooperation between Member States having a direct management interest is foreseen with a view to formulating a joint recommendation in agreement on draft fisheries conservation measures to be forwarded to the Commission.

The initiating Member State shall provide the Commission and the other Member States having a direct management interest, with relevant information on the measures required, including their rationale, scientific evidence in support and details on their practical implementation and enforcement. Member States shall also consult the relevant Advisory Councils.

The initiating Member State and the other Member States having a direct management interest may submit a joint recommendation within six months from the provision of sufficient information. The Commission shall adopt the measures, taking into account any available scientific advice, within three months from receipt of a complete request (Regulation 1380/2013, Articles 11 and 18).

The Common Fisheries Policy framework valid from the 1 January 2014 is thus the basis for this proposal. In addition, Sweden has also taken account of the 11 information items of the Commission´s guidelines from 2008 concerning development of proposals for fisheries conservation measures in marine Natura 2000 sites (see appendix 7).

2.2 Access to the Bratten area

According to the Basic Regulation[2] Denmark has historical fishing rights within the 12 nautical miles zones in the Swedish part of the Skagerrak area. Denmark also has fishing rights in the Swedish EEZ, where the major part of the area concerned in the proposal is located. Denmark has consequently provided fishery data for fishery activities carried out in the concerned area. Denmark has stated that they will participate in the process of formulating a joint recommendation.

As concerns German fishery activities in the Bratten area, the analysis from the German authorities of available electronic data (VMS etc.) has shown that there are no German fisheries taking place in the area. However, since Bratten is part of ICES division III a (Skagerrak and Kattegat), Germany has fishing opportunities for a number of target species (i.e. herring, cod, haddock, saithe – see Annex 1a of regulation 2015/106 – "TAC ´s and Quotas 2015") in the concerned area. Thus, Germany has stated that they will participate in the process of formulating a joint recommendation.

Norwegian fishermen also have access to the Bratten area and were, as mentioned in the introduction involved in the earlier interreg project on Bratten. Analysis of the Norwegian fishing activity shows that it is low in the Bratten area. Norway has been invited as an observer to the Pre-consultation meeting on Bratten held on the 10 of September but did not participate. Norway being a non-member of the European Union is not taking part in the process of formulating a joint recommendation for Bratten.

2.3 Implementation of Environmental protection directives in Sweden

2.3.1 Birds and Habitats Directives

Designation of Natura 2000 sites is undertaken with the support of two EU directives: The Birds Directive (European Parliament and Council Directive 2009/147 / EC of 30 November 2009 on the conservation of wild birds) and the Habitats Directive (Council Directive 92/43 / EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora).

The Swedish Environmental Code is the main legal framework for implementing the Birds Directive and the Species and Habitats Directive in Sweden (7 Chapter section 27-28 Environmental Code[3]). The two directives have been fully implemented in Swedish legislation since 1 July 2001. The Swedish Environmental Protection Agency has a central responsibility for all protected areas in Sweden (7 Chapter Environmental Code), including the Natura 2000 sites.

The Swedish Environmental Protection Agency is also responsible for the reporting according to the Birds Directive and the Habitats Directive - the practical work for the task of reporting on the two directives however, is assigned to the Swedish Species Information Centre. The Swedish Agency for Marine and Water Management has a central guidance responsibility for aquatic protected areas.

The 21 County Administrative Boards (regional authorities) are responsible for the more practical management of the protected areas in their county. They are responsible for the protection and management of the sites as well as for implementing the Natura 2000 management plan.

[2] (EU) No 1380/2013 of the European Parliament and of the Council on the Common Fisheries Policy, amending Council Regulations (EC) No 1954/2003 and (EC) No 1224/2009 and repealing Council Regulations (EC) 2371/2002 and (EC) No 639/2004 and Council Decision 2004/585/EC

[3] Environmental Code (1998:808)

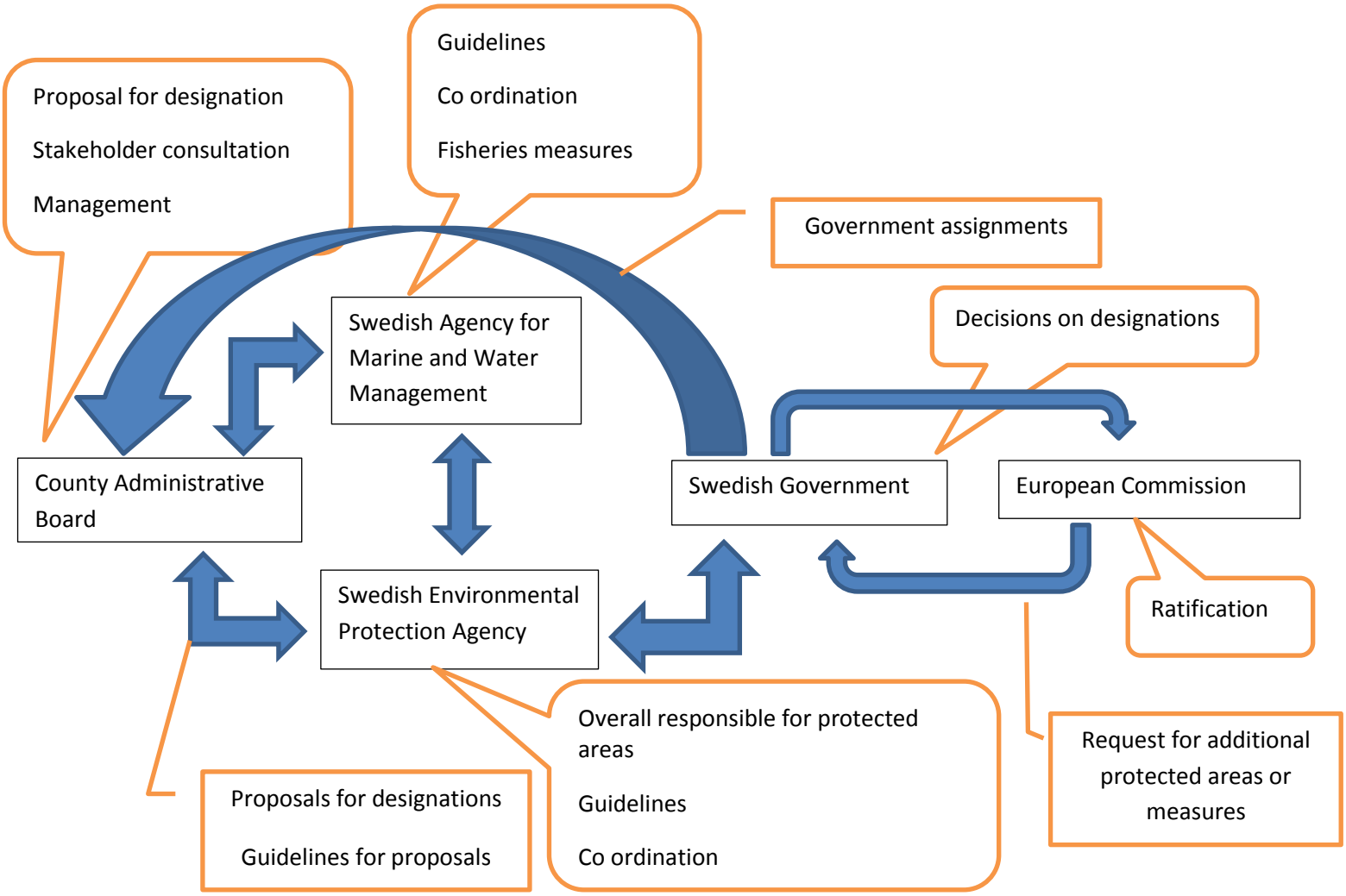

Figure 1. Schematic picture on roles and responsibilities in the process in the designation of Natura 2000 sites.

2.4 Marine protected areas in Sweden and their contribution to reaching good environmental status according to obligations under the Marine Strategy Framework Directive (MSFD)

In Sweden there are 315 Natura 2000 sites with listed marine species or habitats (Appendix 5, figure 5.1). Some of these protected areas are also OSPAR and/or HELCOM marine protected areas (Appendix 5, figure 5.1). In Sweden there are 10 OSPAR marine protected areas and 28 HELCOM marine protected areas. The national designations of marine protected areas also include nature reserves, national parks, biotope protection areas. By the end of 2015, 6,6 % of the Swedish marine waters were protected. According to the Swedish environmental objectives and the milestone target on protected areas, it has been decided by the Swedish Parliament that by 2020, 10 % of the Swedish marine waters should be protected in an ecologically representative and connected system of protected areas. The system of protected areas should be well integrated in the surrounding

landscape and effectively managed. “The Swedish system” is therefore based on both national targets and obligations from EU-law. The existing protected areas contribute to coherent and representative networks of marine protected areas and are a part of the Swedish transposition of the MSFD. In order to achieve good environmental status, Member States must identify which measures are needed and suitable in order to meet their obligations (for further detail on how Sweden has implemented the MSFD, see appendix 6).

In order to achieve an ecologically representative and connected system of marine protected areas Sweden has identified the need to also include species and habitats on the OSPAR list of threatened and/or declining species and habitats. Sweden has therefore decided to incorporate, where necessary, the recommendations to protect the designated OSPAR habitats and species accepted under the OSPAR convention in the proposed measures in order to establish an ecologically representative network of marine protected areas in accordance with the Marine Strategy Framework Directive.

3. Knowledge base; mapping of Bratten

The marine protected area Bratten has been mapped using different techniques and sources of information.

In 2003 and 2004 a detailed bathymetry was mapped in the core area of Bratten (Figure 2b) as part of the Interreg project Skagerrak II. From these detailed maps, conclusions have been drawn on where to do further surveys, for example with remotely operated underwater vehicles (ROV). Since the whole area is not mapped bathymetrically, information on seafloor composition has been provided by Swedish and Danish fishermen. They have indicated zones with rocks and stones in the unmapped areas. In 2007-2009 the Swedish Taxonomy Initiative performed sampling of the benthic fauna in the area. In 2012-2013 sampling was made in pockmarks. A drop video survey was undertaken in 2013 along transects in the main ravine as well as in eight groups of pockmarks. Information from recreational fishermen has also been used when developing this proposal. In Appendix 1 there is a map of surveys in Bratten.

The definitions of the Natura 2000-habitats are currently undergoing revision. However, the Swedish interpretation of the EU-definition of reefs is stated as:

- Biogenic and/or geological formations of hard substrate occurring on hard or soft seafloor. The reefs are topographically separated by the rising of the seabed in the littoral and sub-littoral zone.
- Reefs are often characterized by a zonation of benthic communities of algae and animal species including concretions, incrustations and coral formations. Mussel beds are included in the habitat type, if these have a coverage ratio in excess of 10%.
- Reefs are delimited against the surrounding seafloor where the reefs are transferred by more than 50% of soft seafloor areas and/or where biogenic formations consist of less than 10% of the coverage. Reefs are delimited toward terrestrial habitats at mean sea level.

4. Rationale

4.1 The link between article 11 of the Basic Regulation and the EU Environmental Law Directives

Article 11, first paragraph, of the Basic Regulation states the following. - Member States are empowered to adopt conservation measures not affecting fishing vessels of other Member States that are applicable to waters under their sovereignty or jurisdiction and that are necessary for the purpose of complying with their obligations under article 13(4) of the MSFD, article 4 of the Birds Directive or article 6 of the Habitats Directive. It must be provided that those measures are compatible with the objectives set out in article 2 of the Basic Regulation, meet the objectives of the relevant union legislation that they intend to implement, and are at least as stringent as measures under union law.

Member States are responsible for ensuring favourable conservation status of designated marine habitats and species in their respective Natura 2000 sites and for taking appropriate steps to avoid the deterioration of the habitats and species as well as the disturbance of the species for which the Natura 2000 site has been designated. Furthermore, according to article 13.4 of the MSFD, the programmes of measures established pursuant to this article shall include spatial protection measures, contributing to coherent and representative networks of marine protected areas, adequately covering the diversity of the constituent ecosystems, such as special areas of conservation. These areas may have been designated within the framework of the Habitats Directive and/or Birds Directive (Natura 2000 network) as well as in relation to international or regional agreements to which they are parties (for further details on how Sweden has implemented the MSFD, see appendix 6).

Regional agreements include regional sea conventions as defined in article 3.10 of the MSFD, where for example OSPAR is mentioned.

In accordance with the MSFD, the EU Member States should achieve or maintain good environmental status in their marine waters by 2020 at the latest. They should also define a number of environmental targets with indicators to guide progress in achieving good environmental status. The environmental targets should be based on, among other things, the definition of good environmental status and should take into account identified pressures and impacts.

4.2 Legal basis for the article 11-process

The Bratten-area is a Natura 2000 site and hosts valuable OSPAR-habitats.[4] The ongoing regional process is the valid process to implement conservation measures for fisheries in such areas. For Sweden to fulfill the obligations under EU-law, both with regard to habitats and in order to reach good environmental status by year 2020, all relevant habitats, both Natura 2000 and OSPAR, shall be included in the same proposal for fisheries conservation measures.

The Swedish proposal for a programme of measures under the MSFD includes first cycle-measures addressing impacts from fisheries in marine protected areas.

[4] See relevant GIS-layers at the Swedish Environmental Protection Agency website: www.skyddadnatur.naturvardsverket.se.

4.3 The need for fishing regulations in Bratten

Based on identified threats from fisheries to the designated habitats and species (see chapter 8), there is a need for fishing regulations in Bratten. No-take zones in areas with identified conservation targets are therefore proposed. Establishment of the buffer zones follows the advice from International Council of the Exploration of the Sea (ICES) and The Swedish University of Agricultural Science, Department of Aquatic Resources (SLU Aqua). The site specific layout of the buffer zones was done following consultation with the commercial fishermen in order to reduce the conflict between fisheries and conservation needs, and to minimize displacement effects. The proposed no-take zones have been identified through detailed information on plotter tracks provided by fishermen active in the area. This information, including fishermen´s account of the presence of rock and structures hindering trawling, has complemented the species and habitat maps when establishing the borders of the no-take zones, and the buffer zones around these areas (see figure 4). ICES advice for buffer zones with respect to gear position in relation to vessel position and depth has also been considered (ICES 2013). In cases where buffer zones are less than the advised width, i.e. three times the depth, it is in areas where trawlers are in need of straight through passages (see Appendix 3, figure 3b).

Furthermore, to limit the risk of disturbance due to sedimentation of particles suspended by demersal trawling, the buffer zones are also established to reduce coarse particles to settle on designated habitats and species. The fine particles typically found in suspension following trawling soft seafloors will, however, stay in solution for periods of up to several days and are consequently not taken into account.

Restrictions on fishing activity are proposed to apply to all commercial fishing activities based on effective control, minimizing the need for onboard inspections in this remote area. The proposed fishing restrictions will also contribute to the protection of large predatory fish with an important role for ecosystem structure and functioning in the vulnerable habitats, including several fish species on the OSPAR list of threatened and/or declining species and habitats (OSPAR 2008-6). Fisheries, other than demersal trawling, are non-present or marginal in the area at present (table 4.2 in Appendix 4).

The large western area of Bratten is not surveyed in detail but contains deeper areas of soft sea-floor with no or very little present fishing activity. The rationale for proposing fisheries conservation measures for this area is that the area is relatively unaffected by trawling, and may thus contain habitats and species sensitive to trawling or other mechanical damage. These species may have disappeared or decreased in other neighboring areas. Proposing fisheries conservation measures in such cases is in line with the precautionary approach and is expected to contribute to good environmental status of descriptor 6, Seafloor integrity under the MSFD.

To ensure adequate protection of the proposed no-take zones, better monitoring of real time position of vessels fishing in the area is needed. If VMS and the present 1-hour sampling rate of vessel positions would be the only system of monitoring, no-take zones would have to be substantially larger in size in order to secure efficient control. The proposal therefore involves mandatory AIS for fishing vessels when entering the area, increasing the frequency of GPS positioning of fishing vessels and thus allowing for more accurate control.

4.4 Peer review of proposal

The rationale and principles applied in the present proposal has been peer reviewed by The Swedish University of Agricultural Science, Department of Aquatic Resources (SLU Aqua). A peer review of the proposal ensures that, the proposed fisheries conservation measures, alongside the rationale and principles, on which the proposal builds, are scientifically sound. A peer review has also increased the scientific evidence in terms of references and ensured that relevant scientific studies have been included.
The outcome of the peer review can be summarized to:

- Scientific assessment of the documentation of conservation status in the marine protected area Bratten
- Scientific assessment of the rationale for all fishing activities in particular with mobile bottom contacting gear in areas mapped as:
    - Deep hard bottoms (Natura 2000 habitat: 1170 Reef),
    - Coral Gardens (OSPAR habitat),
    - Sponge communities (OSPAR habitat: Deep Sea Sponge aggregations),
    - Pockmarks and other burrows with elements of hard bottom (Natura 2000 habitat: 1180 Submarine structures made by leaking gases, Natura 2000 habitat: 1170 Reef),
    - Soft bottom with sea pens (OSPAR habitat: Sea pens and burrowing megafauna) and
- The ecological role of large fish species connected to reefs and pockmarks in relation to the documented conservation status.

5. Process

In Sweden, the County Administrative Boards are responsible for the management of the Natura 2000 sites. To ensure adequate protection of conservation targets, the County Administrative Board of Västra Götaland will develop the management plan for the Bratten area and the proposed fisheries measures are expected to contribute to improved conservation status of Reefs, 1170 and Submarine structures made by leaking gases (pockmarks), 1180.

The development of the management plan and specifically the need for fisheries measures was part of the EU-project, “Sea meets land” (www.havmoterland.se) with participants from government agencies, research institutions and fishermen from Sweden, Norway and Denmark. Representatives of NGO’s have been invited to workshops and to submit comments on the proposals.

The following authorities and institutions have participated in the project undertaken by the County Administrative Board of Västra Götaland: Swedish Agency for Marine and Water management, Directorate of Fisheries in Norway, The Danish AgriFish Agency, Ministry of Environment and Food in Denmark, University of Gothenburg (Department of Biology and Environmental Science), Swedish University of Agriculture (Swedish Species Information Centre and SLU Aqua), and the Institute of Marine Research in Norway.

Meetings with fishermen have been arranged to allow for a stakeholder involvement. The first meeting was held in May 2012 with fishermen from Sweden and Denmark as well as the County Administrative Board of Västra Götaland, fisheries agencies from Sweden, Norway and Denmark and scientists from Gothenburg University and the Institute of Marine Research in Lysekil. Three additional meetings have been arranged. Norwegian fishermen attended one meeting. A workshop was held in March 2013 to discuss sustainable use of the Bratten area and to develop the management plan, where also NGO´s were invited. A proposal for the protected areas in Bratten had been presented before this meeting. The proposed fisheries conservation measures were sent out for national and regional consultation in October 2013 (Appendix 8). In this regional consultation process, however, the focus was on protection from bottom contacting gear rather than no-take

areas. Since the pelagic fishery is very limited in the area no specific consultation was conducted with the pelagic fisheries.

The 1st July 2015 a draft proposal on Bratten was sent out broadly (for example Nature and Fisheries Directors, North Sea Advisory Council and the European Commission) together with an invitation to a Pre-consultation meeting in Göteborg on 10 September 2015. Minutes from the meeting are included in Appendix 9. NGO´s received a copy of the proposal the same date. The first ad-hoc group with concerned Member States (Denmark and Germany) was held the 10 September 2015.

The proposal on Bratten was brought up by the French chair at the high level Scheveningen meeting the 7 October 2015.A presentation was made of the proposal at the intercessional working group on OSPAR MPAs the 14 October 2015. The proposal was presented at the North Sea Advisory Council working group for Skagerrak and Kattegat on the 13 November 2015. A consultation with national NGOs was held on the 28 August 2015. See appendix 9 and 10.

Denmark has informed that the proposal has been presented to the national NGOs which are members of the Danish Dialogue Forum for marine Natura 2000 sites. Denmark has also forwarded comments from their NGOs for information. The Danish Fishermen Association PO is requesting for a passage through sub-area 4, whereas the Danish Nature Society argues that the entire Bratten area be closed for fishing.

Germany has informed about their national process which includes submission to the German Fishermen Association.

6. The Marine Protected Area Bratten

6.1 Description

The marine protected area Bratten includes an area mainly located in the Swedish EEZ in Skagerrak (see Figure 2a). The site is delimitated along latitude 58° 35 'N in the north, latitude 58° 16' N in the south, the Swedish EEZ boundary in the west and longitude 10° 42’ E in the east. Bratten was designated as a Natura 2000-site in 2011(pSCI) 2014 (SAC). Since 2012 the area is also part of OSPAR’s network of marine protected areas. The eastern part of the marine protected area contains an area of national interest for Swedish commercial fisheries (Figure 3) according to the Swedish Environmental Code (3 Ch. 5 §).

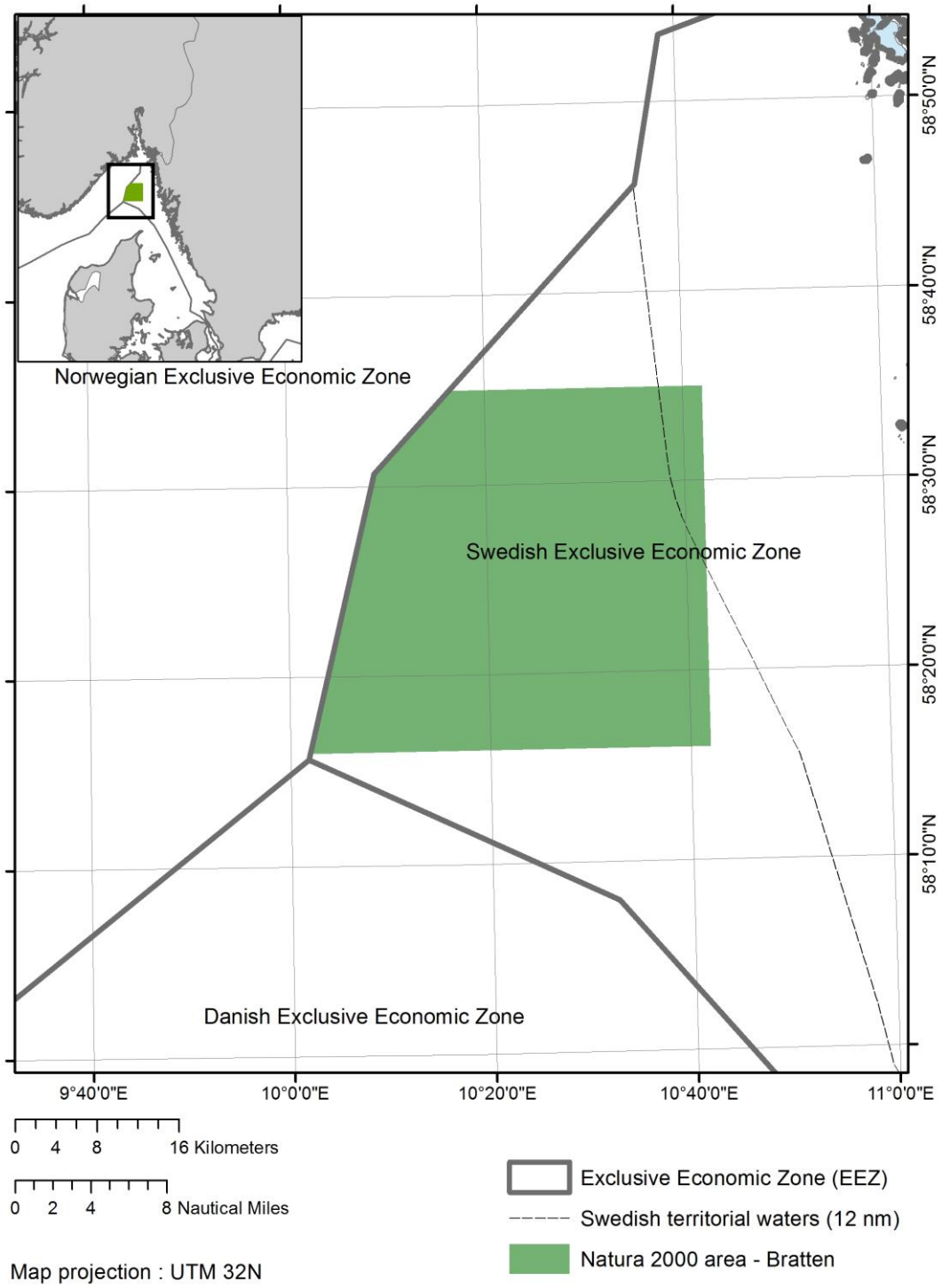

Figure 2a. *The location of Bratten in the Skagerrak.*

6.2 Conservation targets

The core area of the marine protected area Bratten, is a coherent ravine area extending about 20 kilometres in south west - north east direction, with branches at both ends (see Figure 2b). The ravines are narrow (100-300 meters) and up to 100 meters deep with steep sides, especially on the west side. All other parts of the area consist mainly of soft bottom. In mapped soft bottom areas, many big deep burrows are found (Figure 1.g, Appendix 1). These were initially identified as

"pockmarks" which by definition are created through gas seeping out from underlying sediments resulting in a collapse of the seafloor. Later surveys found gas-saturated sediments in some burrows, confirming them as pockmarks, while others seemed to be of a different origin. Carbonate structures are sometimes formed in pockmarks; these are designated as special Natura 2000 habitats (1180 Submarine structures made by leaking gases). In the survey in 2013, carbonate structures have not been confirmed in any of the investigated burrows. However, protruding rocks was found in many burrows (Figure 1.g, Appendix 1). These protruding rocks form deep reef structures, with many rare species, and should therefore be protected.

At the depths found at Bratten (120-530 meters), conditions are constant with high salinity and low temperature all year round. These conditions, coupled with the dramatic topography with steep cliffs and deep cracks, create suitable environments for species and animal communities that are only found in a few places in Sweden and Skagerrak. Several species have their only Swedish records from Bratten (Karlsson et al. 2014), where the topography has provided a shelter in an area with otherwise intense trawling activity.

In total, nearly 250 species were collected at Bratten during the 2000s, of which 37 are red-listed according to the 2010 Swedish Red List 5(i.e. they are either rare and/or have decreased rapidly in number). Species classified as Critically Endangered (CR), Endangered (EN) or Vulnerable (VU) are here referred to as threatened. Most threatened species in Bratten are found in the ravines and the proposed protection zones NE of the ravine. Surveyed locations and a summary of threatened species found are presented in Appendix 1.

The following conservation targets have been identified in the area:

Target	**Natura 2000**	**MSFD (OSPAR)**
Deep hard bottoms	1170 Reefs	
Coral gardens		Coral gardens
Sponge communities		Deep-sea sponge aggregations
Pockmarks and other burrows with elements of hard bottom	1180 Submarine structures made by leaking gases, 1170 Reefs	
Soft bottom with sea pens		Sea pens and burrowing megafauna
Cartilaginous fish such as sharks and rays		Porbeagle *Lamna nasus,* Common skate *Dipturus batis,* Spurdog *Squalus acanthias*
Large fish species connected to reefs and pockmarks		Cod *Gadus morhua*

Table 1. The table presents the Natura 2000-habitats and the species and habitats on the OSPAR list of threatened and/or endangered species that the area was designated for, in order to contribute to an ecologically representative network of MPAs (MSFD). However, both the harbor porpoise *Phocoena phocoena* and the eel *Anguilla Anguilla* have been reported for the OSPAR MPA, but not in need of specific measures in the Bratten area. For eel there are no information indicating that Bratten is an area of specific concern for the species. The distribution of porpoises in the Skagerrak shows that the species is present in and around the waters of Bratten area (Sveegaard et al. 2011).

[5] http://www.slu.se/sv/centrumbildningar-och-projekt/artdatabanken/rodlistan/

However, since there are no fisheries that constitutes specific threats to harbor porpoises e.g. gillnets, specific measures are not proposed.

Both reefs (1170) and pockmarks (1180) were reported to be in unfavourable conservation status in the Marine Atlantic region in the Swedish 2013 Habitats Directive Report (Article 17) (ArtDatabanken 2013).

Findings of specific species associated to designated OSPAR habitats are presented in Appendix 1.

6.3 Conservation objectives

The management plan has not been implemented yet for Bratten, however the preliminary conservation objectives for the area proposed by the County Administrative Board of Västra Götaland are:

Reefs (1170)

- The total area of reefs should not decrease
- The total area of sponge communities should not decrease
- The total area of coral gardens should not decrease
- There should be a natural composition of species and the populations of the typical species[6] should not decrease (The reefs should be functioning as feeding area for large predatory fish, such as *Brosme brosme, Pollachius virens*, sharks and rays
- The population of large stationary fish, such as *Brosme brosme*, should not decrease
- The turbidity should not increase

Pockmarks (1180)[7]

- The total area of pockmarks should not decrease
- There should be a natural composition of species and the populations of the typical species[8] should not decrease
- The turbidity should not increase

Sea-pen and burrowing megafauna communities (MSFD, (OSPAR-habitat))

- The total area of sea-pen communities should not decrease
- There should be a natural composition of species and the populations of the typical species[9] should not decrease.

[6] Typical species*: Gorgonocephalus caputmedusae, Munida sarsi, M. rugosa, M. tenuimana, Psilaster andromeda, Henricia sp., Pteraster sp., Hathrometra sarsii, Swiftia pallida, Primnoa resedaeformis, Paramuricea placomus, Antothela grandiflora, Muriceides kuekenthali, Sarcodichtyon roseum, Phakellia ventilabrum, Geodia baretti, Axinella infundibuliformes, A. rugosa, Mycale lingua, Pollachius virens, Brosme brosme*)

[7] There are indications that the pockmarks that have been reported in Bratten do not fulfill the criteria for pockmarks

[8] Typical species are not decided yet, but will include invertebrate specialists of hard substrate including *Hydrozoa, Anthozoa, Ophiuroidea* and *Gastropoda*

[9] Typical species: *Virgularia mirabilis, V. tuberculata, Funiculina quadrangularis, Kophobelemnon stelliferum, Stylatula elegans, Pennatula phosphorea, Halipteris finmarchica, Asteronyx lovenii, Actinostola callosa, Nephrops norvegicus, Calocaris macandreae, Callianassa subterranea, Calocarides coronatus*

6.4 Ecological recovery

By introducing the no-take zones of a total area of 325,5 square kilometres, parts of Bratten will be protected from any direct physical impact. The buffer zones around the reefs will also contribute to a diminishing sedimentation arising from bottom trawling and the ecosystem function is anticipated to increase as large predatory fish will have the opportunity to seek refuge in these areas.

6.5 Ecosystem service analysis of fishing regulations in Bratten

An analysis has been conducted to assess the effects on marine ecosystems of the proposed fishing regulation in the marine protected area, Bratten. The ecosystem analysis is based on the UN Millennium Ecosystem Assessment (2005) and specifically a report on the status of ecosystem services in Swedish waters (Bryhn et al, 2015). The impact assessment has been carried out by expert judgements with participants from analysts at the Swedish Agency for Marine and Water Management and scientists at the Swedish University of Agricultural Science (SLU). The analysis has been done from a Swedish perspective; hence effects for e.g. fishermen from other countries have not been taken into account. For example no assessment on how the fisheries conservation measures will affect cultural services in small, coastal Danish communities and the cultural heritage.

The analysis indicates that the following ecosystem services mainly are positively affected by the fishing regulation.

Supporting services: Food web dynamics are enhanced by saving more of the large predatory fishes. For biodiversity both the expert judgement and previous studies (e.g. Gell & Roberts 2003) indicates that fishing regulation increase the diversity.

Regulating services: Sediment retention is positively affected since homogenisation and transfer of bottom substrate decreases with the reduced trawling.

Provisioning services: Improved services of genetic and chemical resources are indicated to be obtained. These are connected to biodiversity and there could be valuable resources that are not known today. Food provision is more complex and the time aspect becomes crucial. In the short term perspective, the catches are expected to be reduced, but in the long term the fish stocks are expected to increase and potentially also generate larger catches.

Cultural services: Scenery and inspiration are enhanced e.g. underwater photography and the area is also unique for science and education purposes. As for natural heritage the conservation of valuable areas as the marine protected area Bratten is beneficial also for future generations.

The assessment also showed small negative aspects on ecosystem services for two cultural services, i.e. cultural heritage and recreational fisheries. Recreation in the form of fishing will be reduced, since the recreational fishing also will be limited in Bratten. However, the recreational fishing in Bratten only makes up a small part of the total fishing days in Sweden[10]. An example from an earlier study from 2006 on recreational fishing in Sweden showed a value of 77 EUR (714 SEK) per fishing day (Fiskeriverket, 2009). Using this value the lost benefit for recreational fishing would sum up to approximately 32 600 EUR (300 000 SEK) per year. The limitation of both recreational as well as commercial fishing could also affect the cultural heritage negative. Further, for the ecosystem service food, the assessment of proportionality (9.4 and Appendix 3 and 4) shows the potential economic impact on commercial fisheries. However, it should be stressed that the limitation of commercial fishing in the areas within Bratten, do not affect the fishermen's quotas. Hence, the potential economic loss should be seen as a maximum value since they have the possibility to

[10] Total days of recreational fishing in Sweden are approximately 13.3 million, where of 4 million by the coast and sea. The correspondent days in Bratten is 400. (Sveriges officiella statistik, 2013; Noring, M., 2014).

continue to fish in other areas. It should also be noted that with spill-over effects from the marine protected areas, these services could in the long term be enhanced.

The many benefits from the regulation on the provision of ecosystem services described in the beginning of the section are more difficult to set an economic value on. Several studies however shows indications of high values of marine protected areas. One example is from a recent willingness to pay (WTP) study for increased protection of cold-water coral in Norway. The result indicates an average WTP in the range of 274-287 EUR per household and year (Aanesen et al, 2015).

To sum up, there are several ecosystem services that are impacted by the new fishing regulation proposed in Bratten that are indicating a positive benefit for society. The impacts of the qualitative assessment are mainly positive. From an economic aspect, there has not been any specific study conducted of the economic values of the benefits to human wellbeing in Bratten and a full cost benefit analysis has not been conducted. However, results from other relevant studies indicate that there are economic value losses in the short term due to the effects of recreational and commercial fishing, i.e. ecosystem services recreation and food. In the long term, they may be positive or negative though depending on spill-over effects in nearby areas from increased stocks. The values from willingness to pay studies from other marine protected areas are however much larger and are indicating that there are high values of the non-use values, i.e. cultural ecosystem services in the form of existence values[11]. And in the long term perspective it is also likely that the initial negative effects on commercial fishing will decrease.

[11] Existence values: when nature is valued directly by humans, without the intermediation of functions, goods, or services. For example, people may value the existence of seal populations in their own right rather than because of any functions, goods, or services that they might provide.

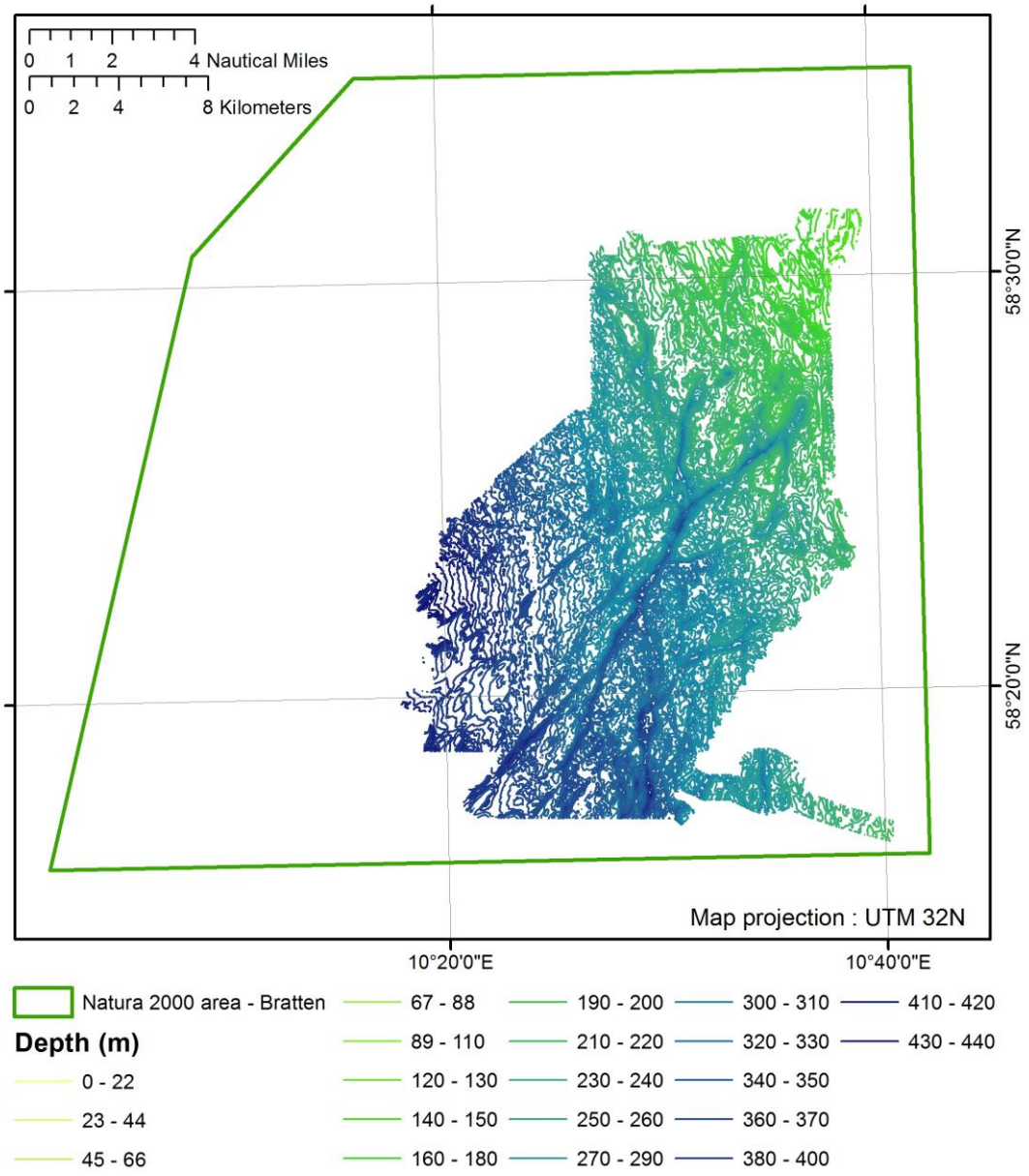

Figure 2b. Map of the Natura 2000 site and OSPAR MPA with a detailed map of the seafloor in the ravine system (UTM32N).

7. Fisheries

7.1 Fleet activity and annual landings 2011-2014

It is in particular an important catch area for northern shrimp *Pandalus borealis*, dominating Swedish landings from the marine protected area (Table 2) and contributing to 19% of the total Swedish landings of northern shrimp during 2011-2014. Other species of importance in weight are witch flounder *Glyptocephalus cynoglossus*, saithe *Pollachius virens*, and cod *Gadus morhua*. The shrimp landings also dominate by far the value of landings from the Bratten area followed in 2014 by witch flounder, cod and saithe (Table 2).

In terms of effort, the shrimp trawl fishery is the most extensive in the marine protected area, amounting to approximately 20% of the total Skagerrak effort. Demersal trawling efforts for a mix of

fish and Norway lobster is the second largest fleet activity, with 4 % of the total Skagerrak fishing effort. Starting 1 February 2013, sorting grids are mandatory in the fisheries for *Pandalus* as to decrease catch of fish that is discarded; the use of a separate "retention tunnel" for by-caught fish is however increasingly used for continued improvement of profits from additional fish landings. In 2014, 41 Swedish vessels operated in the marine protected area Bratten (table 4.1 in Appendix 4).

Bratten is also an important fishing ground for Danish fisheries. It is in particular an increasingly important catch area for halibut *Hippoglossus hippoglossus*, with 61% of landings from the Skagerrak area originating from the marine protected area in 2014. In terms of landing volume, however, northern shrimp dominates Danish landings from the area (Table 3), and contributes to 7-20% of the total Danish landings of northern shrimp from the Skagerrak area during 2011-2014. Other species of importance are saithe followed by witch flounder, and cod. The shrimp landings also dominate by far the value of landings from the Bratten area followed in 2014 by halibut, saithe, witch flounder and monkfish (Table 3). In 2014, 25 Danish vessels operated in the marine protected area (table 4.1 in Appendix 4).

The northern part of the area is occasionally used as a fishing ground for Norwegian fisheries, mainly for shrimp trawling.

In total the Swedish landings in 2014 from the no-take zones represents 5 % of the total landings from the entire N2000 area Bratten. These 5 % landing corresponds to a total landing of approximately 20 000 kg and a value of 124 560 Euro (Appendix 3; Table 3.1 – 3.2). In total the Danish landings in 2014 from the no-take zones represents 1.8 % of the total landings from the entire N2000 area Bratten. These 1.8 % corresponds to a total landing 7 968 kg and a value of 37 120 Euro (Appendix 3; Table 3.3 – 3.4).

Noticeable, the limitations of fisheries in the no-take zones does not necessarily mean a "loss" for the fishermen. If the effort is allocated elsewhere the catches could be fished there instead.

Danish and Swedish bottom trawl fisheries targeting deep-water species e.g., Silver smelt *Argentina silus* and Roundnose grenadier *Coryphaenoides rupestris* have historically (1990s and early 2000) been active in the deeper parts of the Skagerrak.

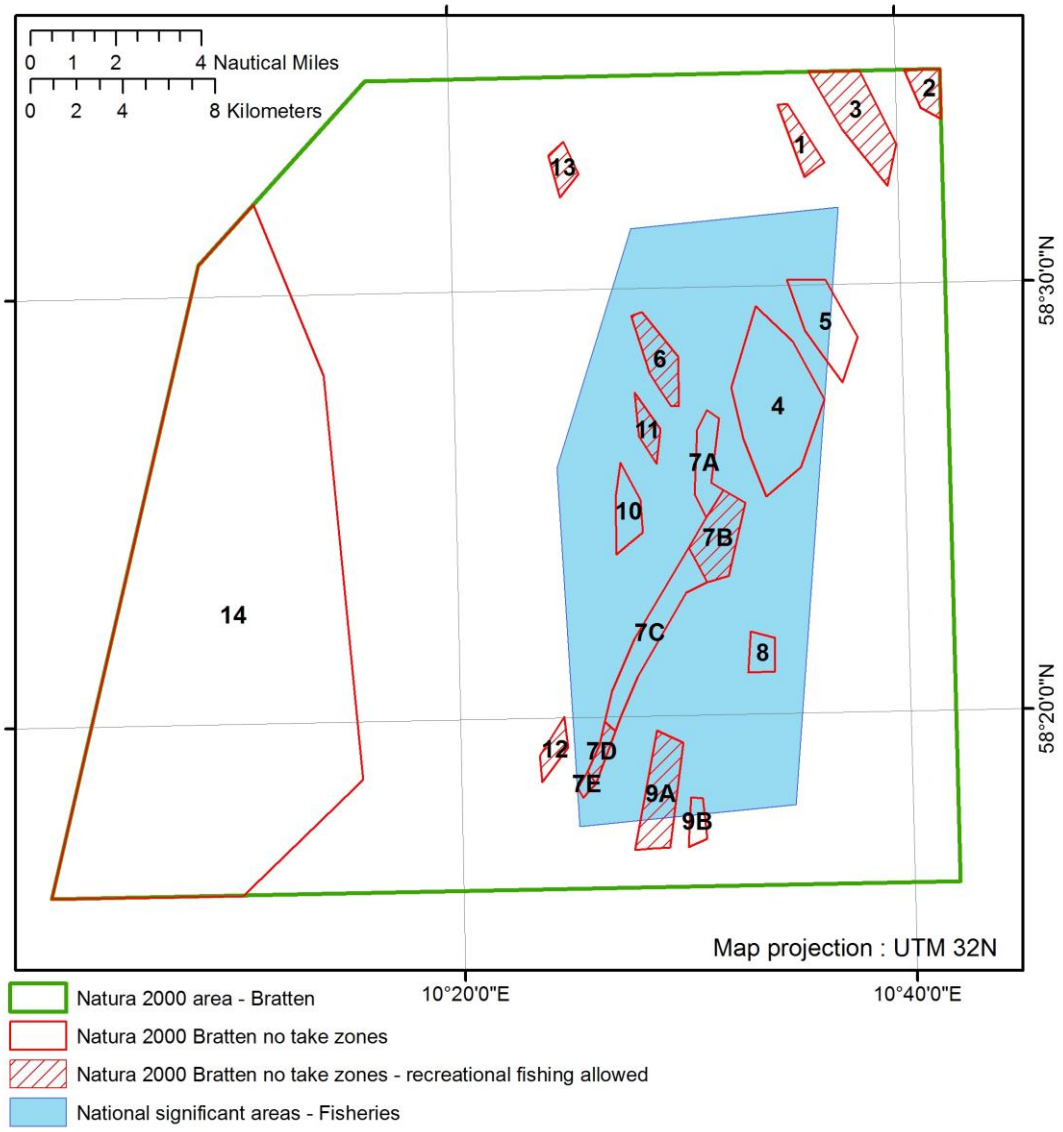

Figure 3. *Area of national interest for Swedish fisheries in relation to the proposed no-take zones*

Table 2. *Swedish annual landings in weight (kg) and value (euro) and % weight of total Skagerrak landings per species from the N2000 Bratten area during years 2011-2014.*

		2011			2012			2013			2014		
Common name	Scientific name	Kg	Euro	%	Kg	Euro	%	Kg	Euro	%	Kg	Euro	%
Northern Shrimp	*Pandalus borealis*	284 904	2 886 101	19	247 991	2 661 008	19	184 560	2 177 560	19	225 466	2 049 655	19
Saithe	*Pollachius virens*	74 948	114 842	15	56 202	86 396	15	66 908	81 376	15	62 608	85 990	18
Cod	*Gadus morhua*	49 144	158 133	10	38 780	117 941	7	25 914	74 674	5	40 469	116 618	7
Witch flounder	*Glyptocephalus cynoglossus*	14 506	77 977	14	19 501	100 973	13	22 666	83 901	14	40 725	132 512	16
Monkfish	*Lophius piscatorius*	4 129	19 280	16	7 327	46 147	17	6 374	40 271	19	8 246	39 715	20
Haddock	*Melanogrammus aeglefinus*	3 144	6 394	2	9 761	19 907	5	4 916	8 682	2	6 579	12 353	3
Norwegian lobster	*Nephrops norvegicus*	2 516	34 420	<1	2 472	28 846	<1	1 221	14 562	<1	1 262	14 910	<1
European hake	*Merluccius merluccius*	2 480	7 029	8	1 431	4 713	6	901	1 826	4	838	1 825	3
Ling	*Molva molva*	2 331	6 299	14	2 033	5 579	12	1 527	3 570	14	2 023	4 712	14
Halibut	*Hippoglossus hippoglossus*	2 318	27 817	44	3 552	36 895	53	1 054	12 780	38	1 160	14 665	43
	Other	8 326	13 354		7 891	17 014		10 178	20 770		10 828	18 244	
Total		**448 747**	**3 351 646**		**396 941**	**3 125 419**		**326 219**	**2 519 972**		**400 205**	**2 491 200**	

Table 3. *Danish annual landings in weight (kg) and value (euro) and % weight of total Skagerrak landings per species from the N2000 Bratten area during years 2011-2014.*

		2011			2012			2013			2014		
		Kg	Euro	%	Kg	Euro	%	Kg	Euro	%	Kg	Euro	%
Atlantic Cod	*Gadus morhua*	7 287	23 668	<1	18 200	60 960	<1	20 677	69 045	<1	20 006	60 764	<1
Atlantic Halibut	*Hippoglossus hippoglossus*	390	4 575	3	910	10 556	9	15 429	137 969	51	15 752	163 152	61
European Hake	*Merluccius merluccius*	413	941	<1	839	2 458	<1	460	1 351	<1	592	1 551	<1
European Plaice	*Pleuronectes platessa*	826	979	<1	2 110	4 171	<1	2 225	4 735	<1	1 604	2 790	<1
Haddock	*Melanogrammus aeglefinus*	641	1 093	<1	5 743	6 741	<1	5 545	6 677	<1	6 780	11 117	<1
Lemon Sole	*Microstomus kitt*	103	386	<1	269	843	<1	304	1 061	<1	253	977	<1
Ling	*Molva molva*	248	446	<1	1 001	1 897	2	2 184	5 160	4	1 937	4 997	4
Monk	*Lophius piscatorius*	1 011	4 750	<1	3 766	14 770	1	12 625	59 575	5	11 930	70 903	5
Northern shrimp	*Pandalus borealis*	79 746	479 178	7	159 078	1 109 428	15	325 212	2 062 292	20	252 904	1 153 312	12
Norway lobster	*Nephrops norvegieus*	5 321	61 170	<1	7 395	70 561	<1	8 401	62 795	<1	2 422	22 594	<1
Picked Dogfish	*Squalus acanthias*	562	1 689	3	278	937	2	63	134	14			<1
Pollack	*Pollachius pollachius*	105	256	<1	579	1 462	<1	441	1 159	<1	622	1 696	<1
Rays + Skates	*Rajidae*	197	268	1	437	733	4	1 131	2 226	8	3 642	4 930	32
Saithe	*Pollachius virens*	21 614	28 620	1	21 584	30 470	1	44 200	58 079	3	88 153	109 244	8

Tusk	*Brosme brosme*	17	66	1	37	85	5	253	802	33	271	581	26
Whiting	*Merlangius merlangus*	37	27	<1	170	167	<1	290	202	<1	214	144	<1
Witch Flounder	*Glyptocephalus cynoglossus*	3 328	8 957	1	17 676	36 619	2	26 461	48 336	3	34 722	76 432	3
Unknown species		61	249	1	180	600	2	158	443	2	158	388	3
Other		114	296		357	1 522		518	1 641		698	1 737	<1
Total		**122 021**	**617 612**		**240 610**	**1 354 980**		**466 578**	**2 523 681**		**442 659**	**1 687 308**	

7.2 Seasonal trends

The conservation targets identified in need of protection in the area mainly consist of species with a sessile, adult stage that grow slowly and are long-lived, and consequently are most sensitive to the first physical impact of trawling. Thus, seasonal trends in fishing effort are probably not relevant for conservation needs, and this analysis was therefore not conducted.

8. Identified threats to habitats and species

8.1 Fisheries

8.1.1 Physical impacts

The impact of fishing on the sea floor is dependent on gear type as well as the resilience of the habitat and species to disturbance. Gear types that mostly affect the sea floor are those that are mobile and in contact with the seabed, such as various demersal trawls. In general, areas with low natural disturbance have been found to be relatively more susceptible to impact (Hiddink et al. 2006).

Habitats particularly sensitive to impact are those that contain fragile organisms with slow growth and slow reproduction as well as habitat-building organisms, e.g. coral and sponge communities on hard bottom. In these cases, the effect of the first impact is substantial (Cook et al. 2013). Although rock structures like cliffs and ravines may have some natural protection from trawling as fishermen claim to generally avoid these areas due to risks of gear entanglement, ROV surveys have revealed several remnants of trawls and even whole trawl nets stuck on the edges of the ravine in Bratten (Figure 1.f, Appendix 1). Severely impacted deep-water coral reefs have also been identified in e.g. Norway as a result of fishing (Fosså et al. 2002). The debris is at times entangled in corals and some whole trawls continue to catch fish as "ghost nets". According to fishermen, most trawl debris consists of older trawls and today there is little risk of losing gear since new technology makes it easier to avoid rocky structures. This however, also implies that trawling could be done closer to the reefs and in areas previously untrawled (Watling & Norse 1998).

As for soft bottom habitats, which are of high economic importance to fisheries and are extensively utilized, true effects on biodiversity are most likely underestimated due to lack of baselines from before onset of trawling (Handley et al. 2014). Documented effects from demersal trawling in soft bottom habitats comprise of reduction of biomass and production (Queirós et al. 2006) and changes in species composition favouring abundance of mobile and scavenging species which may in turn affect ecosystem functioning (Tillin et al. 2006). Slow-growing species in these habitats, such as sea pens (soft corals), are particularly sensitive to physical disturbance by demersal trawls (McConnaughey et al. 2000). This is confirmed by ROV surveys in Bratten, where a significant difference in biodiversity was seen between trawled and untrawled sea beds (Lisbet Jonsson 2013). Another effect from trawl interference in a longer time perspective is the risk of sediment homogenisation which may negatively affect the re-colonisation of species (Handley et al. 2014).

8.1.2 Resuspension of sediment

Demersal trawling redistributes sediments and alters the morphology of the sea floor (Puig et al. 2012). Large amounts of sediment particles are resuspended into the water column when the gear is in contact with the seabed (Martin et al. 2014). The finer sediment particles that are typical of muddy seafloor sink very slowly (several days) and may be transported over long distances by prevailing currents (Bradshaw et al. 2012). There are, however, currently no studies on how fisheries affect sedimentation in Bratten. Several studies report effects on physiological, behavioural and ecological impacts from suspended sediment on different organisms. For example, reduced coral fertilization

(Humphrey et al. 2008), reduced survival of coral larvae (Gilmour et al. 1999), gill damage in fish larvae (Lake and Hinch 1999) as well as reduced survival rate of both fish eggs and larvae (Westerberg et al. 1996; Griffin et al. 2009). Respiration may also shut down in sponges if sediment concentration is too high (Tjensvoll et al. 2013); in this case the frequency of disturbance is highly important.

8.1.3 By-catches in the shrimp fishery

When trawling for fish and shrimps, other non-target species are also caught. In Bratten, by-catch of several endangered species, such as sharks and rays (Artdatabanken 2015), occur. The implementation of mandatory use of sorting grids in combination with the use of a retention tunnel in the shrimp fishery has reduced the amount of by-catch of small fish. However, catches of fish retained in the tunnel in the shrimp fishery are still partly large predatory fish and/or species sensitive to high fishing pressure; if caught as by-catch, where the target species will determine the fishing pressure exerted may exacerbate risks for local extirpation.

8.1.4 Removal of predatory fish in relation to ecosystem structure and function

The fish catches in Bratten are dominated by large predatory species such as cod, saithe, halibut, monkfish, hake, ling and elasmobranchs. Most of the elasmobranch species are sensitive to high fishing pressure and may be threatened with extinction or extirpation (Dulvy et al. 2003, 2014). From being top predators, these large fish also play all an important role for ecosystem structure and functioning (Estes et al. 2011).

8.2 Other human activities

8.2.1 Recreational fisheries

Unlike commercial fisheries, the recreational fishery is concentrated to the ravine. Risks associated with recreational fishing involve entanglement of hooks and lines around endangered species such as corals, causing dislodgement or severe damage and death. The practice of recreational fishing is limited in the area, and threats to designated species and habitats are in general considered to be relatively low; however, ROV surveys have repeatedly shown torn fishing lines around corals, which in many cases had fatal effects on colonies. It has however been debated whether these lines are from recreational fishermen or from other forms of fisheries. Instances where recreational fishermen have caught specimens of corals have been reported. Recreational fisheries focus on large specimens and sensitive species groups such as sharks and rays. Directed fishery for large individuals of the relatively stationary tusk *Brosme brosme* entails that effects on local populations cannot be excluded. Even if "catch and release" is applied when fishing for skates, rays and sharks, handling will lead to an increased risk of injuries that may increase mortality. Also, negative effects from stress, changes in temperature and salinity from catch and release fisheries cannot be ruled out. Fisheries conservation measures for recreational fisheries will be addressed within the Swedish national legislation.

8.2.2 Anchoring

Anchoring on the reefs has the potential to cause greater damage than the actual fishing gear. Recreational fishermen however often avoid anchoring on the reefs, as the anchor could get stuck. Instead anchoring is done on nearby soft bottoms. Some chose not to anchor because of the great depths. Fishing when drifting could increase the risk of entanglement of hooks and lines. The issue of problems with anchoring will be addressed in national legislation.

9. Proposed fisheries management measures

9.1 Purpose

The main purpose of the proposed fisheries management measures is to ensure adequate protection of designated and sensitive species and habitat types:

According to article 6 of the Habitats Directive, Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated. Both reefs and pockmarks were reported to be in unfavourable conservation status in the Marine Atlantic region in the Swedish 2013 Habitats Directive Report (Article 17) (ArtDatabanken, SLU, 2013). See also section on conservation objectives, 6.3.

In order to ensure a representative network of marine protected areas there is a need to protect the habitats and species on the OSPAR List of Threatened and/or Declining Species and Habitats (OSPAR 2008-6). In the framework of regional agreements, measures contributing to coherent and representative networks of marine protected areas should be established according to article 13.4 of the Marine Strategy Framework Directive.

The measures to protect large predatory fish by excluding all fisheries is also necessary to preserve the quality of the habitats, as large resident fish species play a role for the ecosystem structure and functioning of these vulnerable habitats.

The proposed measures are considered necessary to remove current pressures and identified threats related to fishing inside the delineated no-take zones. The added value will be that the conservation targets listed above will be protected from fishing activities, and conservation status is expected shift from unfavorable to favorable in the area.

The large western area is presently not fished, but due to the historical deep-sea fisheries in the deeper parts of the Skagerrak, the measures are considered necessary to preserve this as a large, undisturbed, mainly soft-seafloor area. The status in this area is therefore not expected to change in comparison to the present situation. The added value is that a potential for re-occurrence of deep demersal fisheries will be removed in this area, and the habitats will receive adequate protection from demersal and bottom contacting gear.

9.2 No-take zones

The proposed no-take zones comprise an area of 32 550 hectares, approximately 27 percent of the total area of the marine protected area (Figure 3 and Appendix 2). In this proposal, the no-take zones are defined as areas where no commercial fishing is allowed. As described in 8.2.1 recreational fishery could also pose a threat to designated species and habitats, and therefore in certain no-take zones recreational fishery will also be restricted. This however, is intended to be done using national fisheries legislation.

The pelagic trawl fishery operates the entire water column depending on where the targeted fish aggregate. Pelagic trawls are comparatively large gears in Skagerrak and may open around 50m in height and spread up to 200m. The risk of catching large demersal fish is most pronounced when targeting herring during daytime as the fish aggregate close to the bottom. This potential by-catch may be substantially reduced by selective gear devices. Another aspect of concern is that pelagic

trawls occasionally interact with the seafloor in these fisheries, again the risk is higher when fishing daytime.

With regard to the proposal to close the fishery using pelagic trawls, the added value of the no-take zones in Bratten is to remove by-catches of large predatory fish, and occasional physical disturbance of the seafloor. Today, pelagic trawl fisheries are of very minor importance in the Bratten area and operate mainly further west in the Skagerrak. The relatively small no-take zones are thus neither expected to generate any significant economic impact nor displacement of these fisheries. This however, should not justify postponing or failing to take necessary conservation measures since this type of fisheries could occur in the future.

The proposed no-take zones will affect fishing opportunities in the area, even though the effect has been minimized by accounting for recent fishing patterns (Appendix 3, Fig 3.a, 3.b, 3.c and 3.e). In this assessment, coverage of fishing activities includes demersal trawlers with VMS that have made trips in the Bratten marine protected area. These fishing activities comprise > 90% of the Swedish logbook data for the entire Bratten marine protected area. Other Swedish fisheries, such as small trawlers without VMS, passive gears (Table 4.2, Appendix 4) and pelagic trawling are marginal in the area. With regard to the Danish fishery, the coverage of fishing activities in the Bratten area in relation to the total Danish effort cannot be analyzed at this spatial detail. However, it is assumed that Danish fishing effort with vessels without VMS is marginal, and neither pelagic nor passive fishing segments with VMS have reported any catches from the Bratten area. Also, from the regional process it was informed by the Danish Fishermen PO that essentially the entire Danish fishery in the Bratten area was by demersal trawling and mainly with vessels equipped with VMS.

As mentioned earlier, recreational fishing will be restricted in certain no-take zones implying that all fishing activity in these zones needs to be controlled. A possible way of controlling the recreational fishing activity could be by a mandatory use of AIS. This in turn rules out VMS as an alternative for surveillance.

From a control and enforcement point of view restricting real-time-surveillance to only one specific fishery, e.g. only demersal trawlers will be problematic as information regarding type of gear is not associated with a VMS or AIS position. Consequently, distinguishing between vessels on the basis of gear type in real time is not always possible. Moreover, gear type is not necessarily unique for a vessel which can complicate matters further.

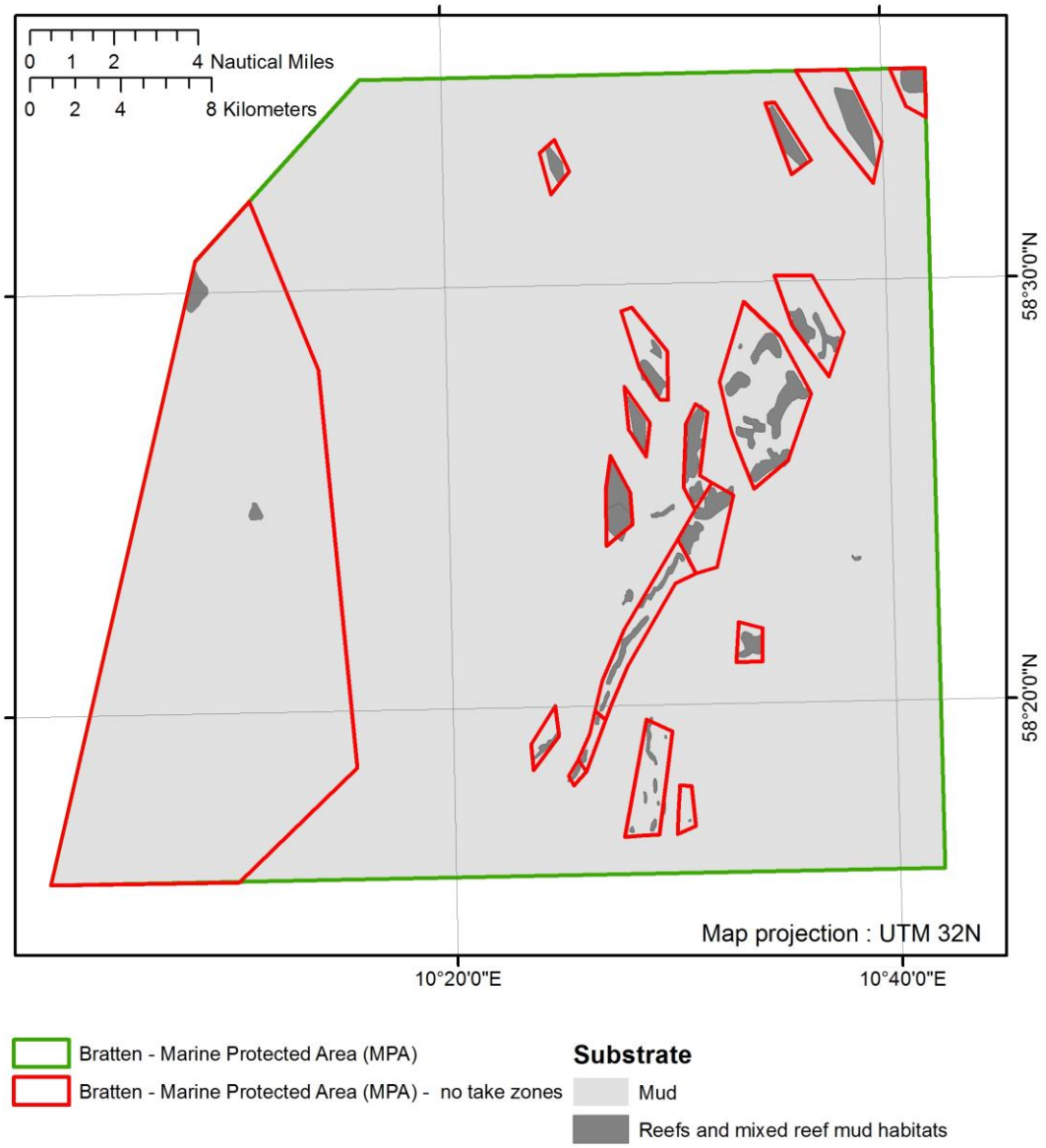

Figure 4. *Map of proposed no-take zones.*

Almost all areas with identified hard bottom structures (H 1170) are part of the suggested no-take zones. Pockmarks and other burrows with elements of hard bottom (H 1180 and H1170) are also included. Identified conservation targets of different zones are given in Table 4.

The establishment of the buffer zones was done following consultation with the commercial fishermen in order to reduce the conflict between fisheries and conservation needs, and to minimize displacement effects. At the same time, conservation of habitats needed to be ensured. A buffer zone of at least 250 meters surrounds the ravines and designated habitats in need of protection. ICES (2013) advices for buffer zoning in relation to maneuverability of the trawl gear to be three times the water depth for closures in areas where the depth is less than 500 m. In practice this means that as long as the boat's position is outside the closed area, there should be no risk that the trawl reaches the protected habitat. However, in the Bratten area the boundaries for buffer zones is at least 250 m wide and therefore, depending on the depth, the boundaries width are not in all areas

in accordance with ICES advice. Between some of the no-take zones, corridors have been established between the surrounding reef structures to allow vessels to pass through. Thus, in these areas buffer zones are smaller than 250 m.

The passages have been made approximately 1000 m wide to ensure that two fishing vessels can meet safely and still continue, while minimizing the risk of interfering with the no-take zones. This is in accordance with the ICES (2013) advice stating that "In the case of Vulnerable Marine Ecosystems (VMEs) on very steep slopes, the risk of straying of bottom trawls is mitigated by the fishers' own incentive to avoid the steep slopes and cliff edges, in which case the buffer zone may be reduced." Following consultation with the fishermen, it was acknowledged by the fishermen that maneuvering the trawl gear under such passages means little risk of displacement of the trawl in relation to the path of the vessel since no hauling or setting is taken place in narrow passages. The width of the buffer zones in these areas is therefore in part limited by the necessary width of the passages. In addition, the corridors consist of areas of intense trawling where it is assumed that the trawling has negatively affected habitat quality. These areas are therefore considered to be of less conservation value at present and are kept as important fishing grounds. Corridors through the ravine system are located in shallower parts of the area and consist mainly of soft bottom.

ID	Area (ha)	Conservation targets	Basis for protection
1	234	Hard bottom	Natura 2000
2	225	Hard bottom	Natura 2000
3	835	Hard bottom, Sponge communities, Sea pens	Natura 2000, MSFD
4	1 964	Sea fans (corals) with associated G. caputmedusae, Sponge communities, Sea pens with associated A. loveni, other threatened species	Natura 2000, MSFD
5	683	Hard bottom, Sea fans (corals), Sponge communities, Sea pens	Natura 2000, MSFD
6	400	Sponge communities, Sea pens, other threatened species	Natura 2000, MSFD
7A		Sea fans (corals) with associated G. caputmedusae, Sponge communities, Sea pens with associated A. loveni, other threatened species	Natura 2000, MSFD
7B		Sea pens with associated A. loveni, other threatened species	Natura 2000, MSFD
7C	1 794	Sea fans (corals) with associated G. caputmedusae, Sponge communities, Sea pens with associated A. loveni, other threatened species	Natura 2000, MSFD
7D		Sea pens, other threatened species	Natura 2000, MSFD
7E		Sea pens with associated A. loveni	Natura 2000, MSFD
8	182	Sea fans (corals), Sea pens with associated A. loveni, other threatened species	Natura 2000, MSFD
9A	664	Sponge communities, Sea pens with associated A. loveni,	Natura 2000, MSFD
9B	129	Sea fans (corals), Sea pens	Natura 2000, MSFD
10	302	Sea fans (corals) with associated G. caputmedusae, Sponge communities, Sea pens with associated A. loveni	Natura 2000, MSFD
11	159	Hard bottom	Natura 2000
12	154	Sea pens	MSFD
13	164	Hard bottom	Natura 2000
14	24 657	Sea pens, other threatened species	MSFD

Table 4. *Identified conservation targets of the different zones.*

Large fish are also identified as conservation targets in the area, however, they are not listed in table 4 as they are mobile and cannot be associated to a certain area. Some of the species can, however be found in table 1. Certain areas hitherto relatively unaffected by trawling are included in the no-take zones, despite limited knowledge about their conservation value. In western Bratten, a large no-take

zone (Zone 14, see Figure 3) at great depth (around 530 meters) has been proposed. This area is in recent years essentially unaffected by trawling and although high conservation values only have been confirmed in parts of the area, it is considered unique and prioritized for protection in line with a precautionary approach to data deficiency.

The proposed fishing restrictions will protect sensitive fish species and important predators, such as gadoids and elasmobranchs in the closed reef habitats, but do not provide a general protection for these mobile species at the scale of the marine protected area (see chapter 6.2 on conservation targets and Appendix 3 table 3).

9.3 Requirement of AIS as a complement to VMS

The proposal includes mandatory AIS, class A transponder, transmitting the fishing vessel´s position every 30 seconds when entering the marine protected area. AIS is mandatory for fishing vessels from EU Member States that are 15 meters or more as of 31 May 2014. VMS is currently compulsory for fishing vessels over 12 meters. In this proposal, all fishing vessels are included in requirements of AIS, class A, within the marine protected area. For further information on the basis for the proposed AIS as a complement, see chapter 10 on control and enforcement.

9.4 Assessment of proportionality

Sweden is of the opinion that the proposed measures are necessary for the protection of designated habitats and species within the marine protected area Bratten. To achieve the conservation objectives for the site, described in section 6.2, it is essential to protect areas with identified occurrence of designated habitats and species from physical disturbance due to fishing activities. The fact that some of the area is yet unmapped, also makes it necessary to protect some areas that are relatively unaffected by trawling to make sure not to damage unexplored conservation targets.

The no-take zone 4 (Figure 3.b and 3.d, Appendix 3) shows a conflict between the conservation targets and the fishing activities; for Swedish fisheries slightly over 2% of catch volume and value of the whole marine protected area may originate from this area (Table 1 and 2 in Appendix 3). For Danish fisheries approximately 0,9% of catch volume and 0,8% of the value of the whole marine protected area may originate from this area (Table 3 and 4 in Appendix 3). On each side of zone 4 there are two corridors proposed to allow fishery across the elongate area of high conservation values running south west – north east through the Bratten marine protected area. In the whole marine protected area the shrimp landings, in terms of catch, contribute to 20% of the total Swedish shrimp landing and between 7-20% of the total Danish shrimp landings during the period from year 2011-2014. The proposed no-take zone 4 would thus result in only a marginal loss to the fishery.

Landings in weight and value for the proposed no-take zones are found in Appendix 3.

In order to avoid unnecessary constraints for the fisheries concerned, the design of no-take zones with associated buffer zones has been discussed on a number of meetings with Swedish, Danish and Norwegian fishermen. In suitable areas, were risks of damaging valuable species and habitats are low, corridors have been suggested dividing reef habitats to allow for continued fishing between no-take zones. This dialogue has been important to minimize an un-proportionate negative effect on fishing opportunities.

Mandatory AIS transponders for all fishing vessels inside the area are necessary to ensure adequate control of small no-take zones, as would not be possible with VMS. It is thus essential for the possibility of continuous fishing through the suggested corridors. The increased frequency of GPS

positioning by the use of AIS does only marginally increase costs for fishing vessels, and only for small vessels that have not already installed transponders.

9.5 Displacement

The no-take zones reduce the potential trawling area by 27 % in the Bratten marine protected area. However, by considering the spatial distribution of conservation targets and the historical fishing, the proposed fishing regulations only affect approximately 5% of the landings. The creation of corridors in between areas of high conservation values in collaboration with the fishermen should ensure that displacement will be local within Bratten. Given the same effort, there will be increased effort in already trawled areas, and trawlers may search for new fishing grounds within and outside the marine protected area. This effort increase is however marginal compared to the overall effort within the Bratten are, and the Skagerrak-Kattegat (IIIA). Displacement effects are thus likely to be seen as marginal.

Since the fishermen will no longer be able to access no-take zone 4 (Figure 3.b and 3.d, Appendix 3) they will have to follow one of the passages created on either side of no-take zone 4. This may slightly increase the distance the fishermen have to steam with their fishing vessels increasing fuel costs, but will nevertheless allow for continued trawl tracks through the Bratten area. Furthermore, fishermen with specific fishing patterns in the Bratten area may have to alter these due to the no-take zones. During a transition phase, there may be an increased cost for these fishermen before new fishing patterns have been established, but the corridors provide guidance on other well established trawl tracks.

10.Control and enforcement

AIS transponders, transmitting the boats position every 30 seconds will be mandatory for fishing vessels when entering the marine protected area, would electronically supply fisheries authorities with detailed real time information on vessels position, speed and course. The objective is to try to ensure that no-take zones are respected.

The proposal includes mandatory AIS, class A transponder, transmitting the fishing vessel´s position every 30 seconds when entering the marine protected area. AIS is mandatory for fishing vessels from EU Member States that are 15 meters or more as of 31 May 2014. VMS is currently compulsory for fishing vessels over 12 meters. In this proposal, all fishing vessels are included in requirements of AIS, class A, within the marine protected area. It should also be explicit that the AIS has to be functioning, turned on and transmitting positioning data during the whole fishing journey.

Clear evidence for being obliged to use no-take zones to enable effective and appropriate control, is developed in chapter 9.2. Several aspects of an effective control and surveillance can be covered by using AIS instead of VMS.

10.1 Arguments for applying AIS as a complement to VMS

Vessel speed and geographical constraints of proposed areas

To better understand our proposal to control and enforce the Bratten by means of AIS with 30 second intervals, as opposed to VMS positions transmitted at 60-minute-intervals it is necessary to firstly, understand some basic aspects of the VMS system and secondly, understand the geographical constraints of the proposed protected areas.

1. Speed is a function of distance and time and distance in turn can be extrapolated from the length between two VMS positions. This entails that depending on speed, the distance a vessel can travel in a specific time frame will consequently differ, see table 5 below. At a speed of 3 knots a vessel will in 10 minutes time travel 926 meters and 5 556 meters in 60 minutes time (red row in table).

Speed (knots)	Distance (meters) as a function of time (minutes)					
	10 min	20 min	30 min	40 min	50 min	60 min
0,5	154	309	463	617	772	926
1,0	309	617	926	1 235	1 543	1 852
1,5	463	926	1 389	1 852	2 315	2 778
2,0	617	1 235	1 852	2 469	3 087	3 704
2,5	772	1 543	2 315	3 087	3 858	4 630
3,0	926	1 852	2 778	3 704	4 630	5 556
3,5	1 080	2 161	3 241	4 321	5 402	6 482
4,0	1 235	2 469	3 704	4 939	6 173	7 408
4,5	1 389	2 778	4 167	5 556	6 945	8 334
5,0	1 543	3 087	4 630	6 173	7 717	9 260

Table 5. Illustration on distance and speed to clarify the distance a vessel can move when fishing between two VMS signals

1. Several of the proposed protected areas are quite small in size. This is also the case for several corridors between areas. The smallest area is approximately 465 x 800 meters, whereas a corridor may be as narrow as 625 meters (orange squares in figure).

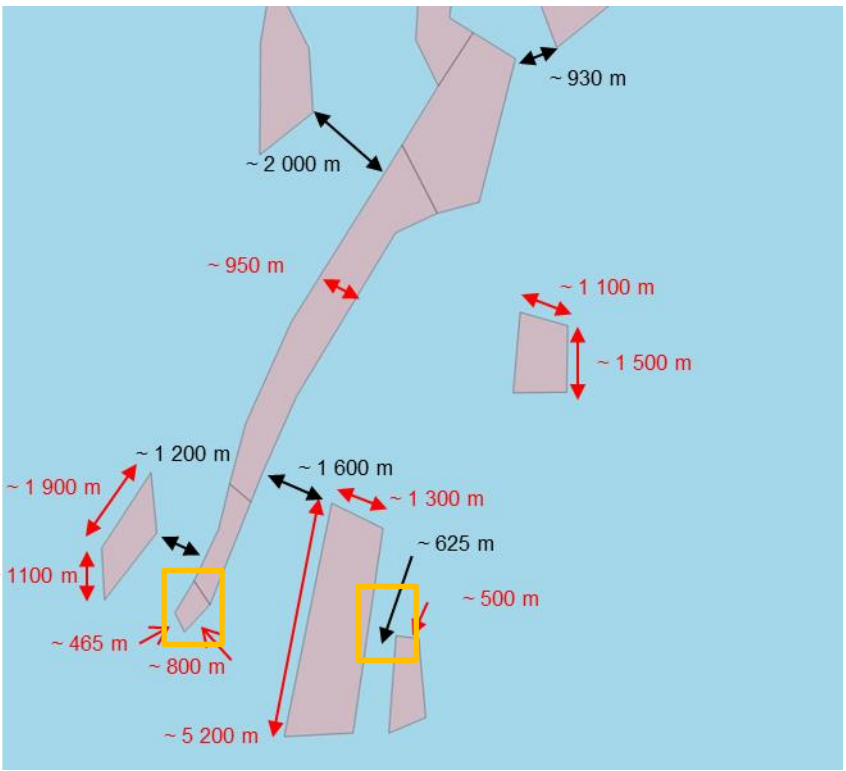

Figure 5. Size (meters) of the proposed protected areas and corridors, respectively.

Whether AIS signals can be recorded or not when a vessel is far off shore is not an issue as the different AIS base stations in Sweden more than adequately cover the Bratten area. Moreover, it should also be explicit that the AIS has to be functioning, turned on and transmitting positioning data inside the area.

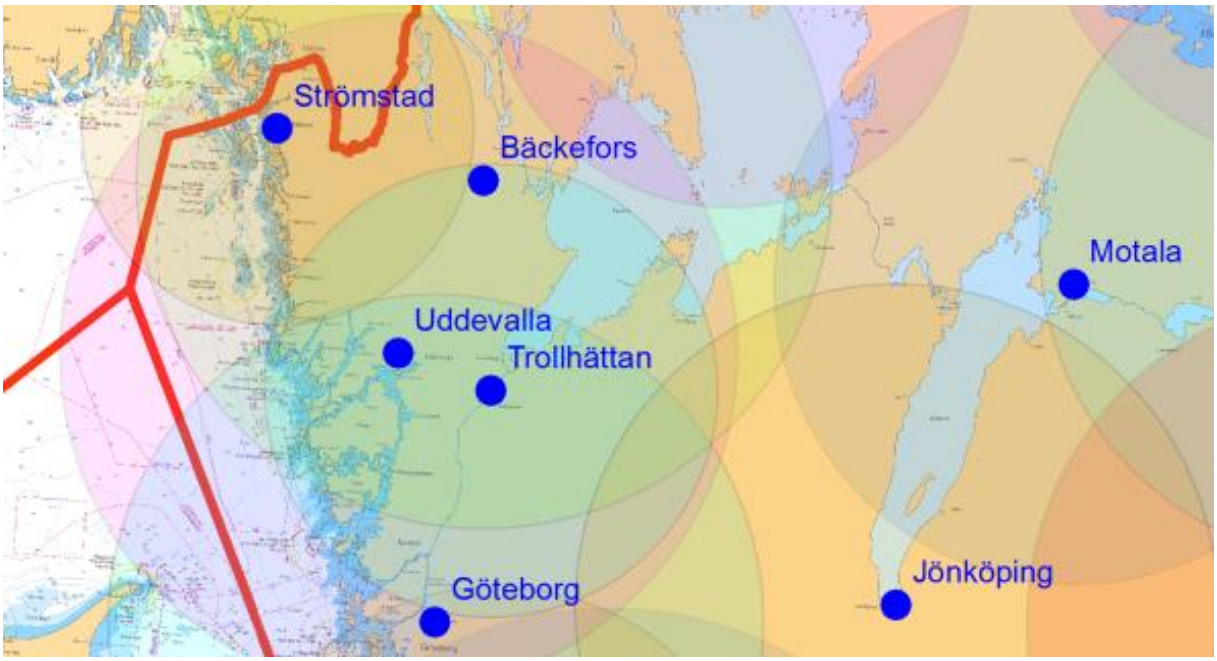

Figure 6. Coverage of shore based AIS base stations

10.1.1 Shortcomings of recording a fishing activity with VMS

Ultimately, when considering vessel speed and time, respectively in relation to the geographical constraints of the proposed no-take zones it becomes evident that VMS signals at 60-minute-intervals will not suffice to determine whether a vessel has been fishing within a no-take zone or not. This is further exemplified by a schematic picture of a fishing haul (green line) in the Bratten area, see figure 7. In the figure, two protected areas (A and B) are depicted. VMS signals between the set and haul positions at 60-minute-intervals are plotted (blue line). The figure shows two different possible situations as a result of recording VMS signals at 60-minute-intervals. In the first instance (A) a vessel has trawled in a no-take zone yet, the activity will not show up in the VMS record. In the second instance (B), the vessel has kept outside of the no-take zone yet, the VMS record will show the opposite. In both instances the VMS track records will result in an inaccurate representation of the fishing activity.

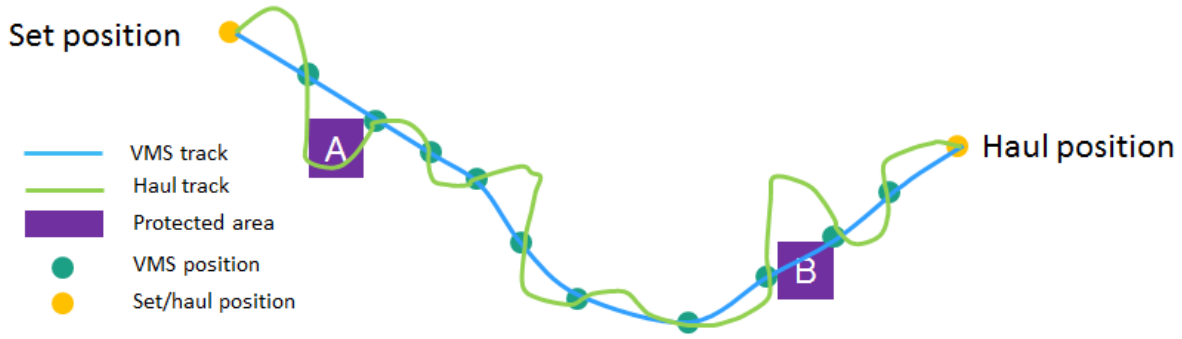

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Figure 7. *Schematic picture of how VMS tracks a haul*

10.1.2 Benefits of recording a fishing activity with AIS-A

A schematic picture of the same fishing haul (green line) as mentioned above, but with AIS-A as tracking method instead, is shown in figure 8. The red dotted line depicts AIS-A signals at 30-second-intervals. The figure clearly shows how the AIS-A track closely adheres to the haul track, i.e. the vessels relative position to the no-take zones can be easily tracked. In contrast to the VMS track record, the AIS-A record is an accurate representation of the fishing activity.

Figure 8. *Schematic picture of how AIS tracks a haul*

10.1.3 Tracking an actual haul as recorded in the electronic logbook

SwAM has developed a method of tracking a haul (as opposed to an entire fishing trip) as recorded in the electronic logbook. By correlating VMS/AIS signals to the set and haul positions and plotting the VMS/AIS signals corresponding to the time between these two positions, it is possible to track an actual haul whereby infringements can be detected, see figure 9.

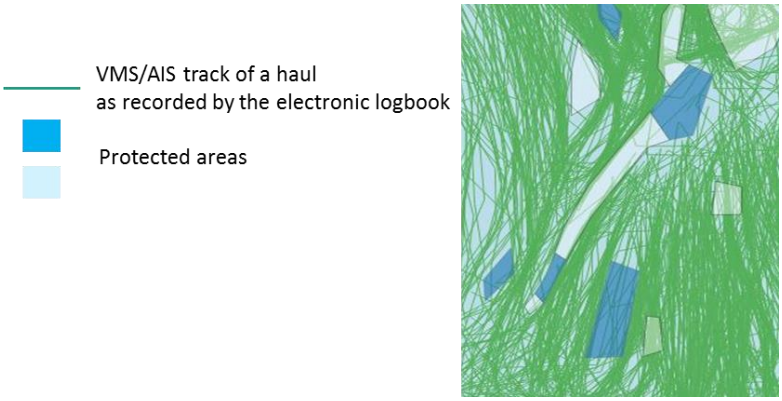

Figure 9. *VMS tracks of all hauls for 2014 in the southern part of the proposed area. The figure clearly shows tracks going through several of the proposed areas.*

10.2 Compliance

Compliance, i.e. the level of adherence to regulation can be assessed and achieved by detecting infringements, either in post-landing or real time, which in turn will result in different approaches to control and inspection

10.2.1 Administrative control

As soon as haul details are recorded in the electronic logbook it is possible to cross-check these data with the vessels position data in order to obtain haul tracks. Thereafter as part of the daily routine within the administrative control process, infringements can be detected by analyzing the haul tracks, (see description of method above in 10.1.3). In the case of an infringement, criminal proceedings can be initiated. If the preliminary investigation is continued and the prosecutor decides to prosecute, there will be a trial at the Swedish district court that adjudicates in criminal cases as the court of first instance.

10.2.2 Targeted inspections

Analyzing haul tracks will also provide the possibility to identify risk objects, i.e. vessels with deviating fishing patterns. These risk objects in turn constitute the basis for targeted sea and air borne surveillance and inspection activities.

10.2.3 Real time surveillance

The studying of vessel-movements by means of VMS, AIS and radar in a real time surveillance system such as the Swedish system “Sjöbasis” (figure 10) provides two different approaches to detecting possible infringements and achieving compliancy, either preemptively or reactively. As the ultimate goal is to deter all infringements, a preemptive approach whereby a vessel when approaching a no-take zone may be informed in advance by the Swedish Coast Guard and SwAM, is preferable to the more reactive approach where infringements are detected and acted upon as they occur.

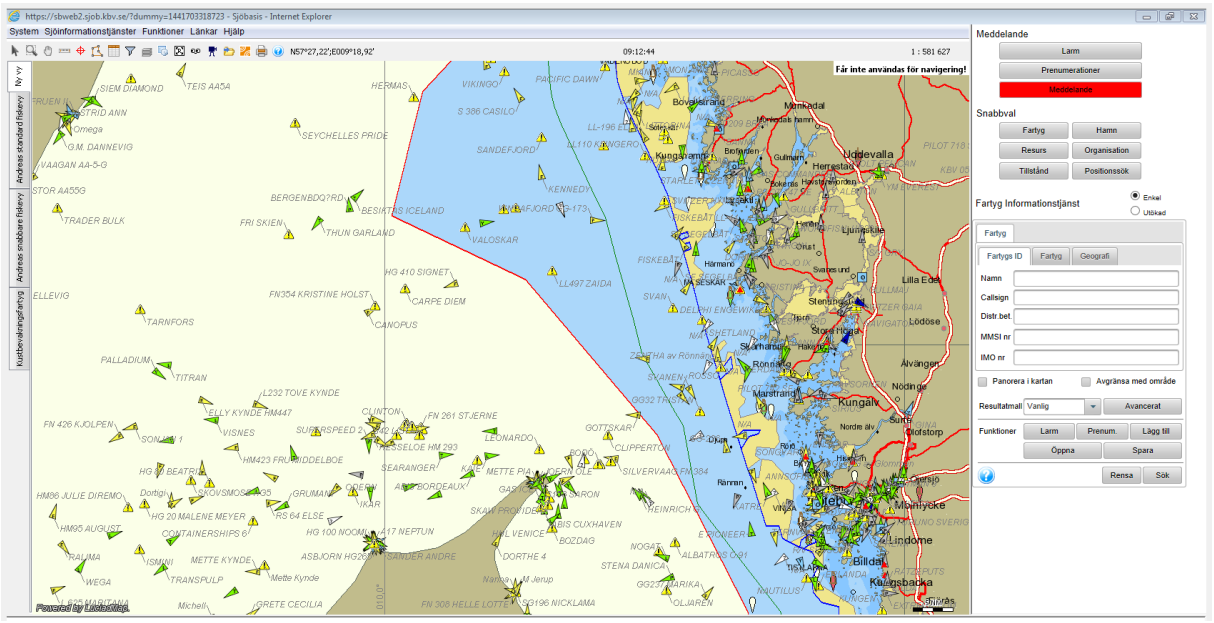

Figure 10. Sjöbasis is an IT system for real time surveillance of activities at sea (VMS, AIS, radar)

Ultimately, surveillance by using AIS-A tracking as a complement to traditional VMS-tracking will, with regards to the small areas and corridors in the Bratten area, provide authorities the opportunity to optimize surveillance and control efforts to target identified risk objects as well as the opportunity to better detect and consequently act upon infringements.

11. Monitoring

Through the Habitats Directive, the European Union sets requirements to maintain and/or restore a favourable conservation status for the habitat types and species covered by this Directive. Monitoring of the conservation status is an obligation arising from Article 11 of the Habitats Directive for all habitat types and species covered by this Directive. In the Natura 2000 area of Bratten these habitat types are Reefs (1170) and Submarine structures made by leaking gases (1180). However, this provision is not restricted to Natura 2000 areas and data need to be collected both in and outside the Natura 2000 network to achieve a full appreciation of the conservation status. The main results of this monitoring have to be reported to the Commission every six years according to Article 17 of the Directive.

In Sweden there is a national monitoring program. There is a plan to successively update the monitoring program to be more useful for several purposes. As Bratten is not yet having a formal Natura 2000 management plan, the details on a specific monitoring program for the area have not been presented. However, monitoring of the area will most likely include studies on trawl tracks in combination with biological monitoring.

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13.Appendix

Inventory of Appendices

Appendix 1: Maps of surveys and findings in the area.

Figure 1.a: All locations where species surveys have been performed since year 2000.

Figure 1.b: Findings of threatened species in the area.

Figure 1.c: Findings of sea fans (gorgonian type corals) and the brittle star Gorgonocephalus caputmedusae

Figure 1.d: Findings of sponge communities

Figure 1.e: Findings of sea pens (soft corals) and the brittle star Asteronyx loveni

Figure 1.f: Findings of lost fishing gear

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Appendix 2: Coordinates of breakpoints for the marine protected area Bratten and the proposed no-take zones.

Appendix 3. Swedish and Danish fisheries data for the proposed no-take zones.

Figure 3a. Swedish VMS positions during 2011-2014, the whole area

Figure 3b. Swedish VMS positions during 2011-2014, focus on no-take areas

Figure 3.c Danish VMS positions during 2011-2014, the whole area

Figure 3.d Danish VMS positions during 2011-2014, focus on no-take areas

Table 3.1. Swedish landings (kg) from the proposed no-take zones during 2011-2014.

Table 3.2. Value of Swedish landings (euro) from the proposed no-take zones during 2011-2014.

Table 3.3. Danish landings (kg) from the proposed no-take zones during 2011-2014.

Table 3.4 Value of Danish landings (euro) from the proposed no-take zones during 2011-2014.

Table 3.5 Species landed (in kg) from the proposed no-take zones by Swedish fishery during 2011-2014.

Appendix 4. Effort and number of vessels for the Swedish and Danish fleets in the marine protected area Bratten, and landings in value (euro) and weight (kg) for Swedish fisheries not included in the analysis.

Appendix 5. Marine protected areas in Sweden

Appendix 6. General legal framework of relevance for MSFD and other Environmental Directives in Sweden

Appendix 7. Overview of the 11 information items in the Commission guidelines from 2008

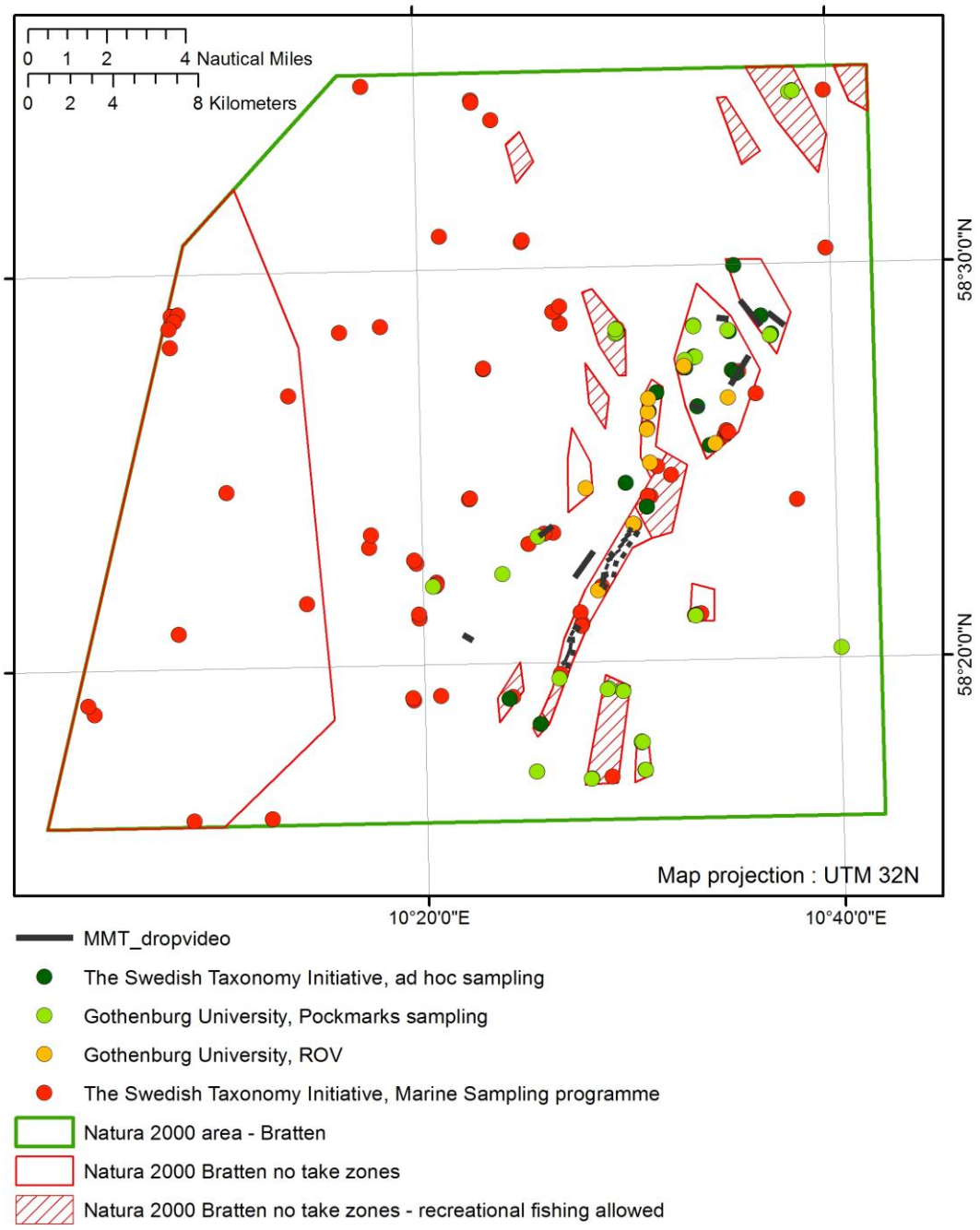
Appendix 8. Overview of formal and informal consultations

Appendix 9. Reports and minutes from meetings

Appendix 10. County Administrative Board formal consultation with national fisheries and NGOs (only available in Swedish)

Appendix 1: Maps of surveys and findings in the area.

Figure 1.a All locations where species surveys have been performed since year 2000.



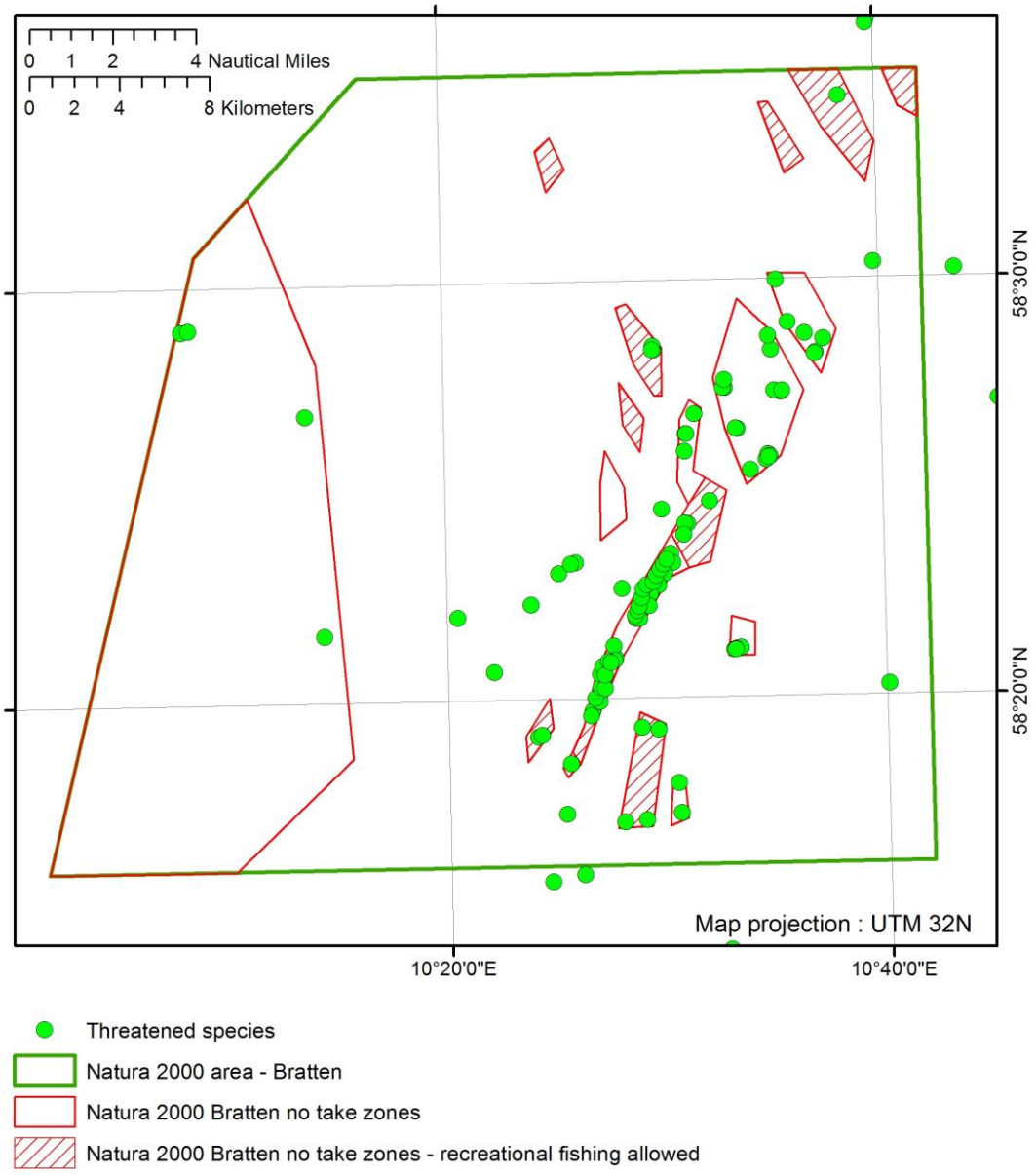


Figure 1.b Findings of threatened species in the area.

The species outside the no-take zones are mainly different species of sea pens, the brittle star *Asteronyx loveni* and the crab *Munida sarsi*.

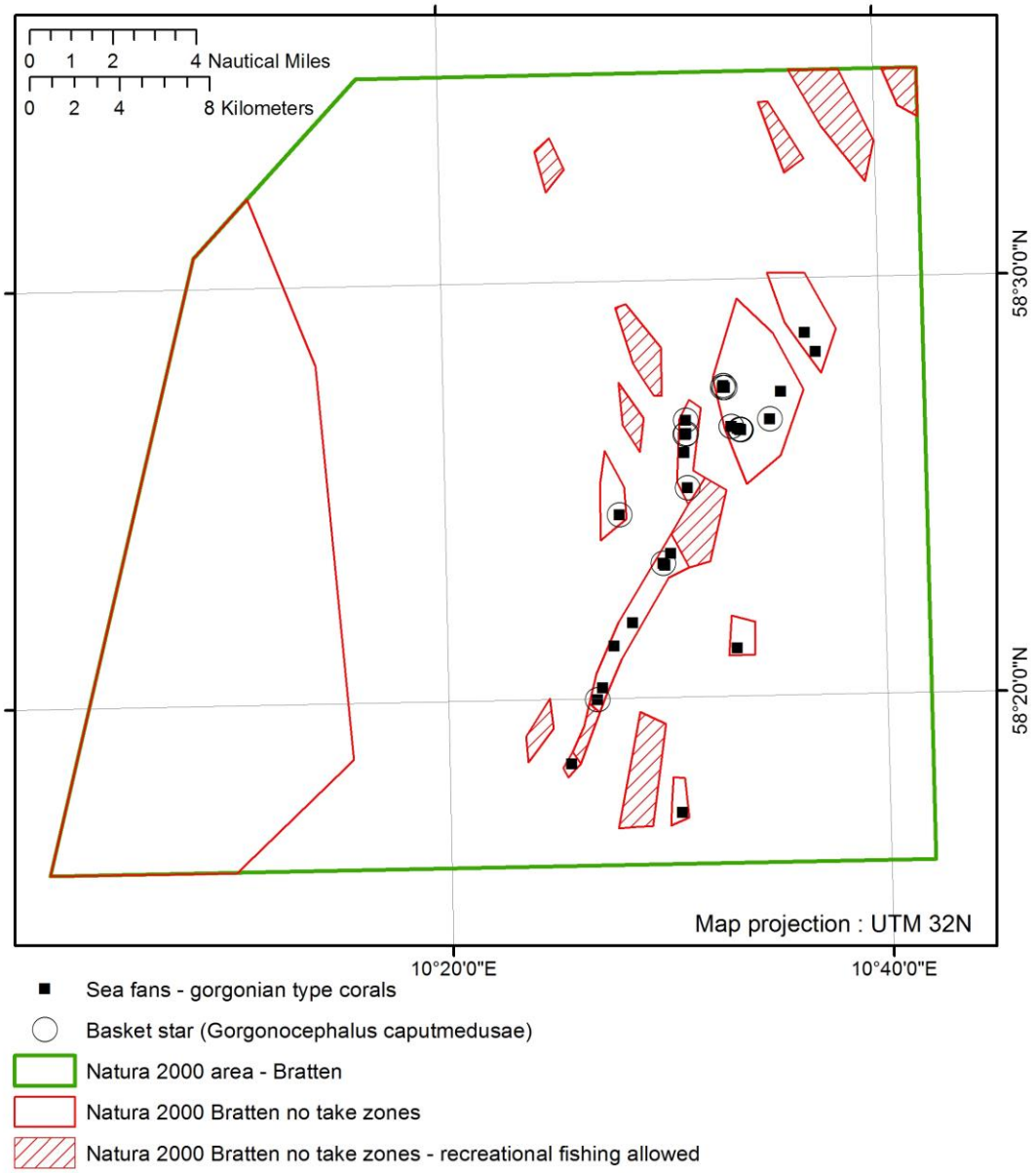


Figure 1.c Findings of sea fans (gorgonian type corals) and the brittle star *Gorgonocephalus caputmedusae*

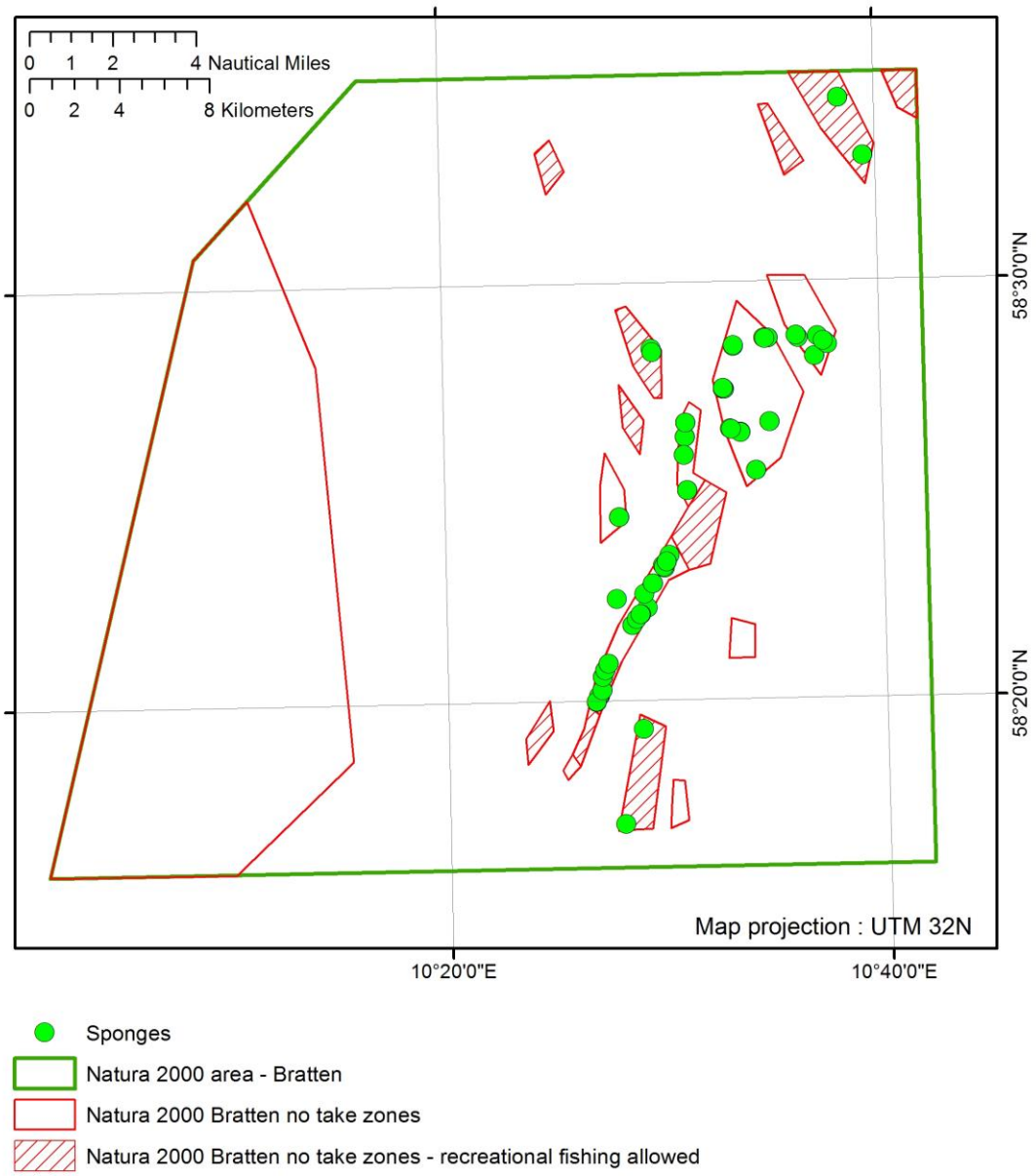


Figure 1.d Findings of sponge communities

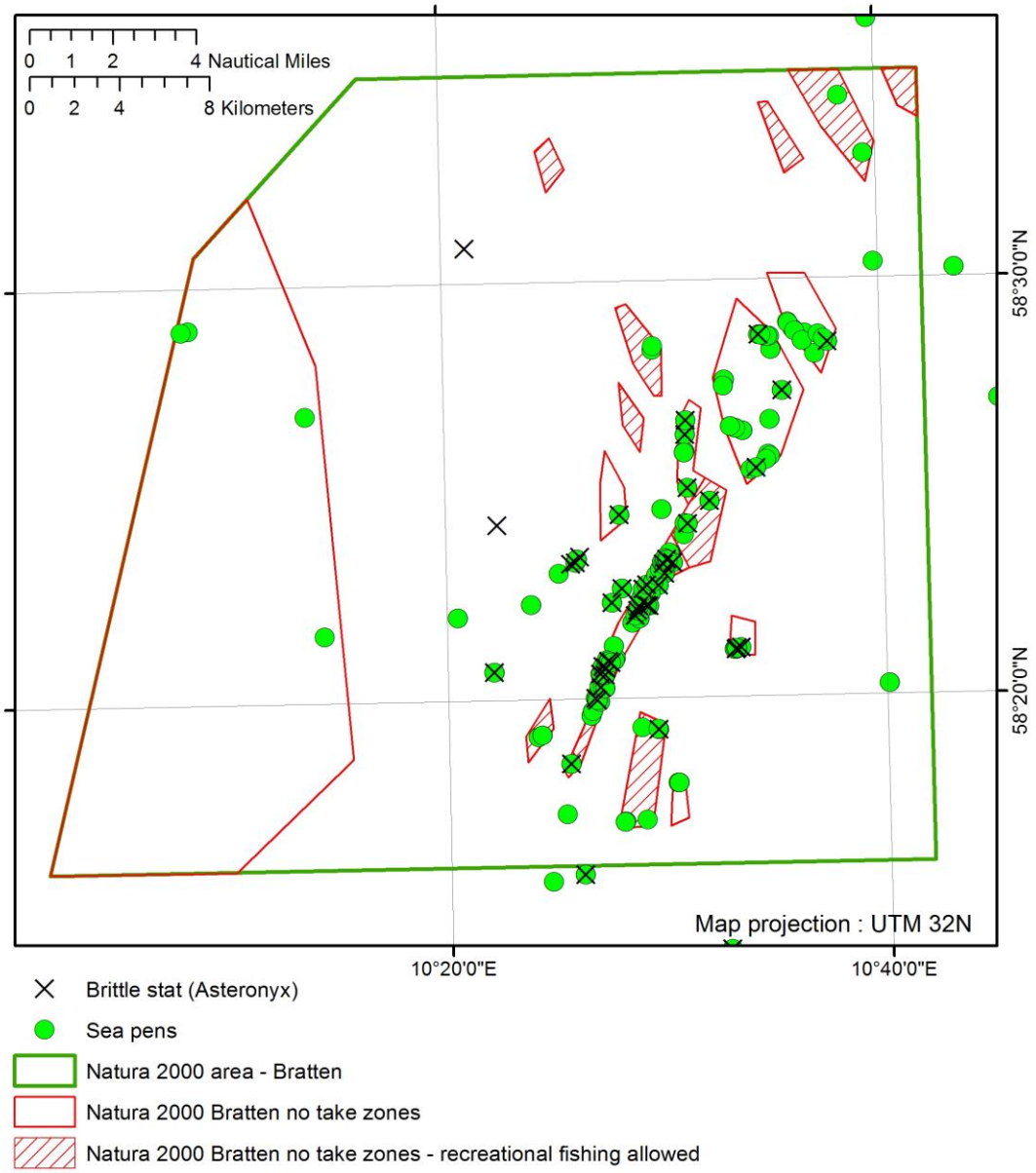


Figure 1.e Findings of sea pens (soft corals) and the brittle star *Asteronyx loveni*

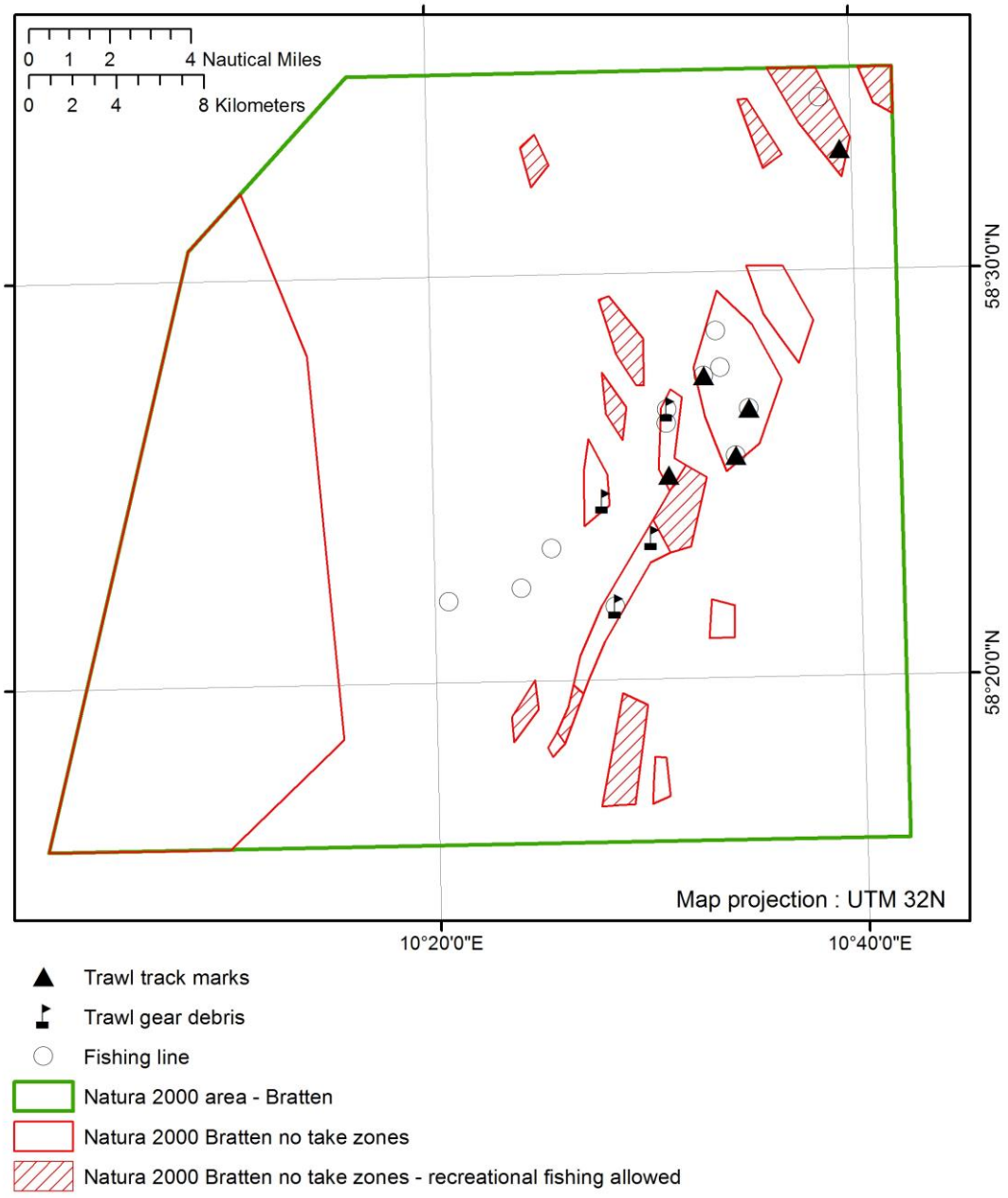


Figure 1.f Findings of lost fishing gear

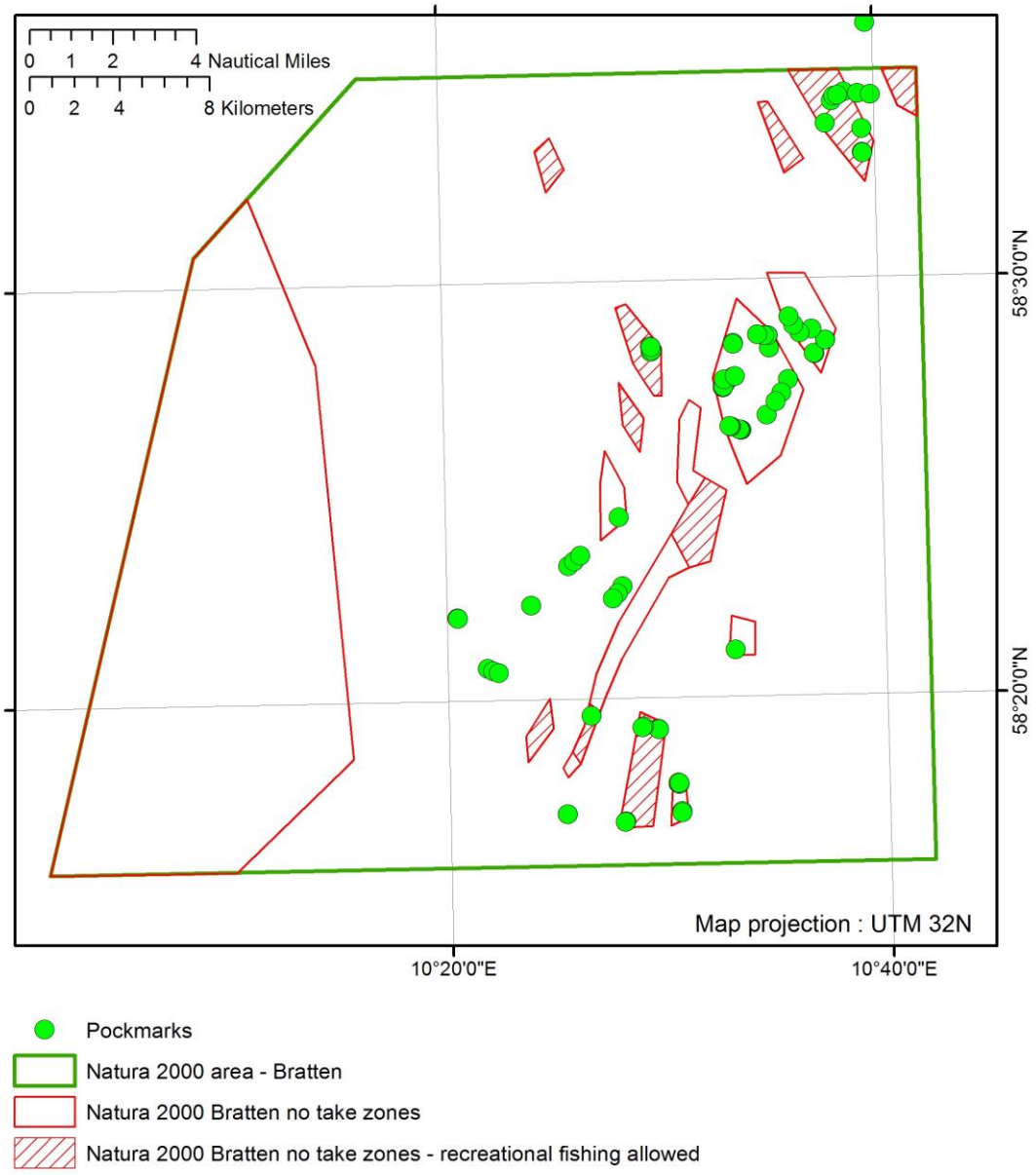


Figure 1.g Investigated pockmarks

Appendix 2: Coordinates of breakpoints for the marine protected area Bratten and the proposed no-take zones.

Table 2.1

1. Bratten Area

1.
Bratten

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
1 NV	58.58333	10.2712	58°35.00000'	10°16.27200'	WGS 84
2 NO	58.58333	10.70000	58°35.00000'	10°42.00000'	WGS 84
3 SO	58.26667	10.70000	58°16.00000'	10°42.00000'	WGS 84
4 SV	58.26667	10.0286	58°16.00000'	10° 1.71600'	WGS 84
5 V	58.5127	10.1449	58°30.76200'	10° 8.69400'	WGS 84

2. Bratten Subareas

1.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.54797	10.61234	58°32.87790'	10°36.74060'	WGS 84
	58.54242	10.59708	58°32.54500'	10°35.82450'	WGS 84
	58.57086	10.57829	58°34.25170'	10°34.69750'	WGS 84
	58.57113	10.58584	58°34.26810'	10°35.15060'	WGS 84

2.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.58333	10.70000	58°35.00000'	10°42.00000'	WGS 84
	58.56370	10.70000	58°33.82200'	10°42.00000'	WGS 84
	58.56834	10.68500	58°34.10000'	10°41.10000'	WGS 84
	58.58333	10.67333	58°35.00000'	10°40.40000'	WGS 84

3.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.55448	10.66622	58°33.26910'	10°39.97320'	WGS 84
	58.53817	10.65876	58°32.29020'	10°39.52570'	WGS 84
	58.56064	10.62589	58°33.63840'	10°37.55310'	WGS 84
	58.58333	10.60196	58°35.00000'	10°36.11730'	WGS 84
	58.58333	10.64007	58°35.00000'	10°38.40390'	WGS 84

4.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.41829	10.56322	58°25.09750'	10°33.79350'	WGS 84
	58.44104	10.54711	58°26.46240'	10°32.82670'	WGS 84
	58.46111	10.53893	58°27.66680'	10°32.33610'	WGS 84
	58.49248	10.55864	58°29.54890'	10°33.51860'	WGS 84
	58.47846	10.58575	58°28.70790'	10°35.14500'	WGS 84
	58.45570	10.60806	58°27.34200'	10°36.48350'	WGS 84
	58.42942	10.58963	58°25.76550'	10°35.37770'	WGS 84

5.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.46216	10.62166	58°27.72940'	10°37.29940'	WGS 84
	58.48256	10.59473	58°28.95350'	10°35.68400'	WGS 84
	58.50248	10.58245	58°30.14850'	10°34.94690'	WGS 84
	58.50213	10.61104	58°30.12770'	10°36.66250'	WGS 84
	58.47972	10.63392	58°28.78320'	10°38.03540'	WGS 84

6.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.45450	10.49373	58°27.26970'	10°29.62370'	WGS 84
	58.46727	10.47881	58°28.03640'	10°28.72850'	WGS 84
	58.48976	10.46582	58°29.38550'	10°27.94900'	WGS 84
	58.49126	10.47395	58°29.47550'	10°28.43730'	WGS 84
	58.47369	10.50004	58°28.42150'	10°30.00260'	WGS 84
	58.45435	10.49995	58°27.26080'	10°29.99710'	WGS 84

7A.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.42132	10.53168	58°25.27900'	10°31.90080'	WGS 84
	58.41075	10.51853	58°24.64520'	10°31.11190'	WGS 84
	58.41982	10.50999	58°25.18910'	10°30.59960'	WGS 84
	58.44487	10.51291	58°26.69240'	10°30.77450'	WGS 84
	58.45257	10.52057	58°27.15410'	10°31.23410'	WGS 84
	58.44918	10.52936	58°26.95050'	10°31.76140'	WGS 84
	58.42423	10.52271	58°25.45370'	10°31.36260'	WGS 84

7B.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.38556	10.51815	58°23.13340'	10°31.08930'	WGS 84
	58.39907	10.50486	58°23.94410'	10°30.29150'	WGS 84
	58.41075	10.51853	58°24.64520'	10°31.11190'	WGS 84
	58.42132	10.53168	58°25.27900'	10°31.90080'	WGS 84
	58.41613	10.54764	58°24.96810'	10°32.85830'	WGS 84
	58.38776	10.53394	58°23.26560'	10°32.03650'	WGS 84

7C.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.32839	10.44780	58°19.70320'	10°26.86790'	WGS 84
	58.33196	10.43976	58°19.91750'	10°26.38560'	WGS 84
	58.34390	10.44579	58°20.63390'	10°26.74760'	WGS 84
	58.36412	10.46309	58°21.84690'	10°27.78530'	WGS 84
	58.39907	10.50486	58°23.94410'	10°30.29150'	WGS 84
	58.38556	10.51815	58°23.13340'	10°31.08930'	WGS 84
	58.38172	10.50243	58°22.90310'	10°30.14580'	WGS 84
	58.34934	10.46503	58°20.96020'	10°27.90180'	WGS 84
	58.33436	10.45233	58°20.06130'	10°27.13950'	WGS 84

7D.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.32839	10.44780	58°19.70320'	10°26.86790'	WGS 84
	58.30802	10.43235	58°18.48120'	10°25.94100'	WGS 84
	58.31273	10.42636	58°18.76400'	10°25.58170'	WGS 84
	58.32300	10.43560	58°19.38030'	10°26.13580'	WGS 84
	58.33196	10.43976	58°19.91750'	10°26.38560'	WGS 84

7E.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.30802	10.43235	58°18.48120'	10°25.94100'	WGS 84
	58.30260	10.42276	58°18.15610'	10°25.36540'	WGS 84
	58.30642	10.41908	58°18.38510'	10°25.14470'	WGS 84
	58.31273	10.42636	58°18.76400'	10°25.58170'	WGS 84

8.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.35013	10.56697	58°21.00780'	10°34.01820'	WGS 84
	58.35000	10.54678	58°21.00000'	10°32.80660'	WGS 84
	58.36596	10.54941	58°21.95780'	10°32.96480'	WGS 84
	58.36329	10.56736	58°21.79740'	10°34.04160'	WGS 84

9A.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.28254	10.48633	58°16.95260'	10°29.17970'	WGS 84
	58.28185	10.46037	58°16.91100'	10°27.62230'	WGS 84
	58.32814	10.47828	58°19.68840'	10°28.69670'	WGS 84
	58.32314	10.49764	58°19.38860'	10°29.85840'	WGS 84

9B.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.28254	10.49986	58°16.95260'	10°29.99170'	WGS 84
	58.30184	10.50257	58°18.11030'	10°30.15410'	WGS 84
	58.30128	10.51117	58°18.07690'	10°30.67040'	WGS 84
	58.28560	10.51374	58°17.13590'	10°30.82450'	WGS 84

10:

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.40548	10.47122	58°24.32870'	10°28.27330'	WGS 84
	58.39710	10.45111	58°23.82620'	10°27.06670'	WGS 84
	58.41923	10.45140	58°25.15390'	10°27.08390'	WGS 84
	58.43279	10.45575	58°25.96770'	10°27.34510'	WGS 84
	58.41816	10.46972	58°25.08960'	10°28.18310'	WGS 84

11.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.44546	10.48585	58°26.72760'	10°29.15080'	WGS 84
	58.43201	10.48224	58°25.92060'	10°28.93410'	WGS 84
	58.44293	10.46981	58°26.57590'	10°28.18890'	WGS 84
	58.46009	10.46709	58°27.60540'	10°28.02550'	WGS 84

12.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.31923	10.39146	58°19.15400'	10°23.48740'	WGS 84
	58.33421	10.41007	58°20.05280'	10°24.60400'	WGS 84
	58.32229	10.41228	58°19.33750'	10°24.73680'	WGS 84
	58.30894	10.39258	58°18.53660'	10°23.55460'	WGS 84

13.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.53667	10.41500	58°32.20000'	10°24.90020'	WGS 84
	58.55302	10.40684	58°33.18120'	10°24.41050'	WGS 84
	58.55827	10.41840	58°33.49610'	10°25.10420'	WGS 84
	58.54551	10.42903	58°32.73030'	10°25.74190'	WGS 84

14.

Point	Latitude N	Longitude E	Latitude N	Longitude E	Geodetic Datum
	58.26667	10.02858	58°16.00000'	10°1.71510'	WGS 84
	58.51269	10.14490	58°30.76120'	10°8.69400'	WGS 84
	58.53608	10.18669	58°32.16510'	10°11.20140'	WGS 84
	58.46886	10.23659	58°28.13140'	10°14.19520'	WGS 84
	58.31137	10.26041	58°18.68210'	10°15.62490'	WGS 84
	58.26667	10.16996	58°16.00000'	10°10.19740'	WGS 84

Appendix 3. Swedish and Danish fisheries data for the proposed no-take zones.

Figure 3a. Swedish VMS positions during 2011-2014, the whole area

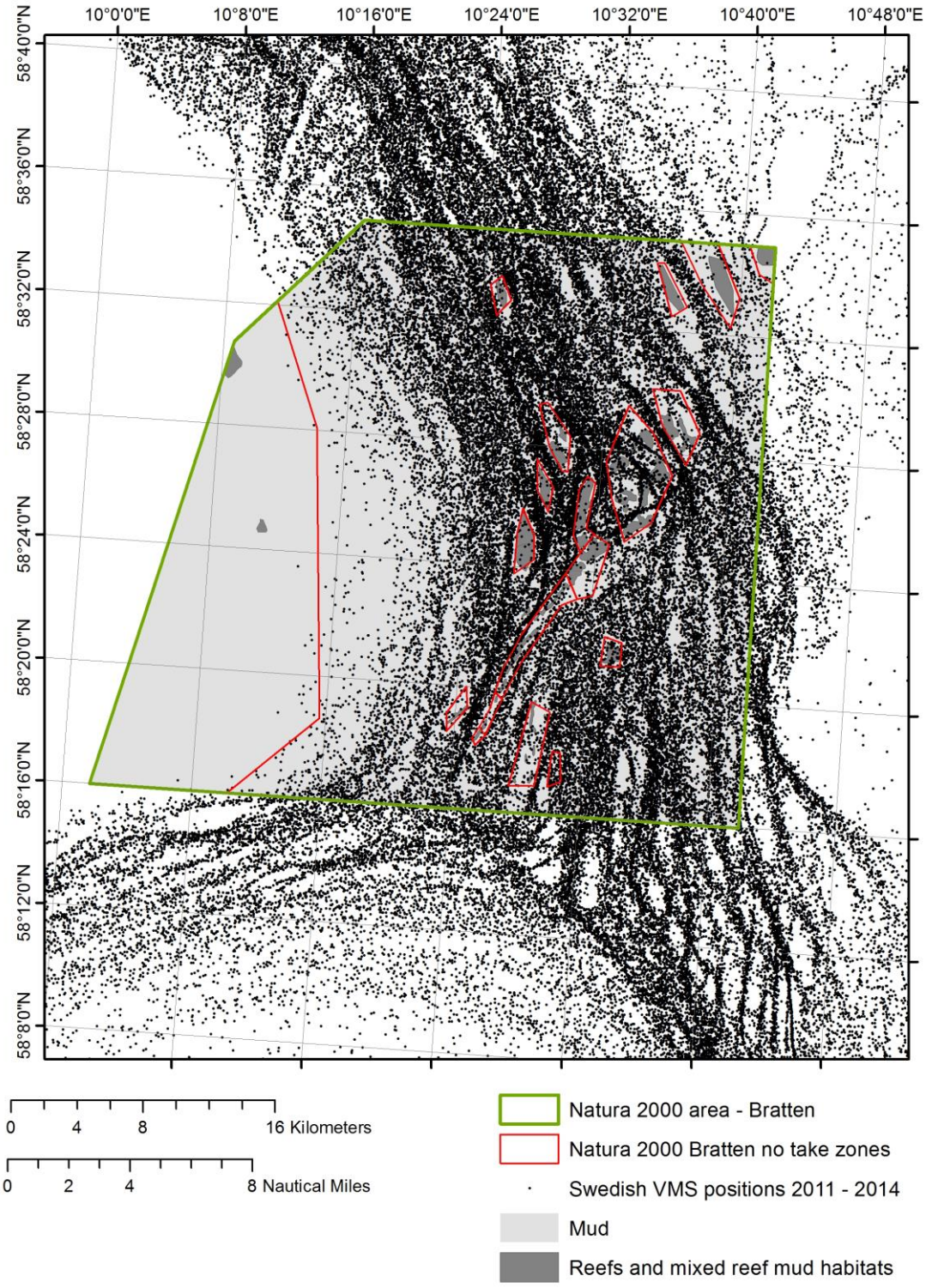


Figure 3b. Swedish VMS positions during 2011-2014, focus on no-take areas

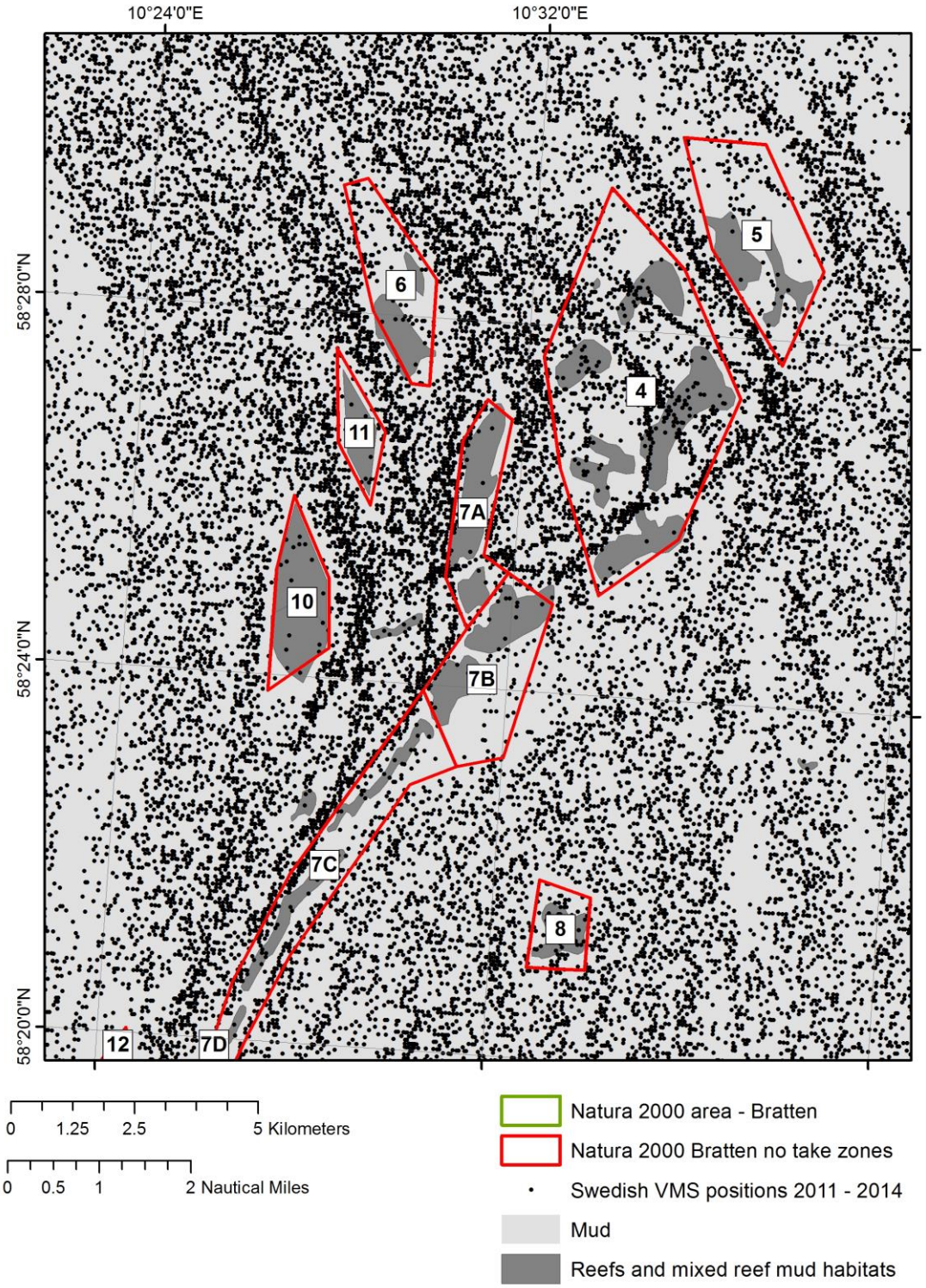


Figure 3.c Danish VMS positions during 2011-2014, the whole area

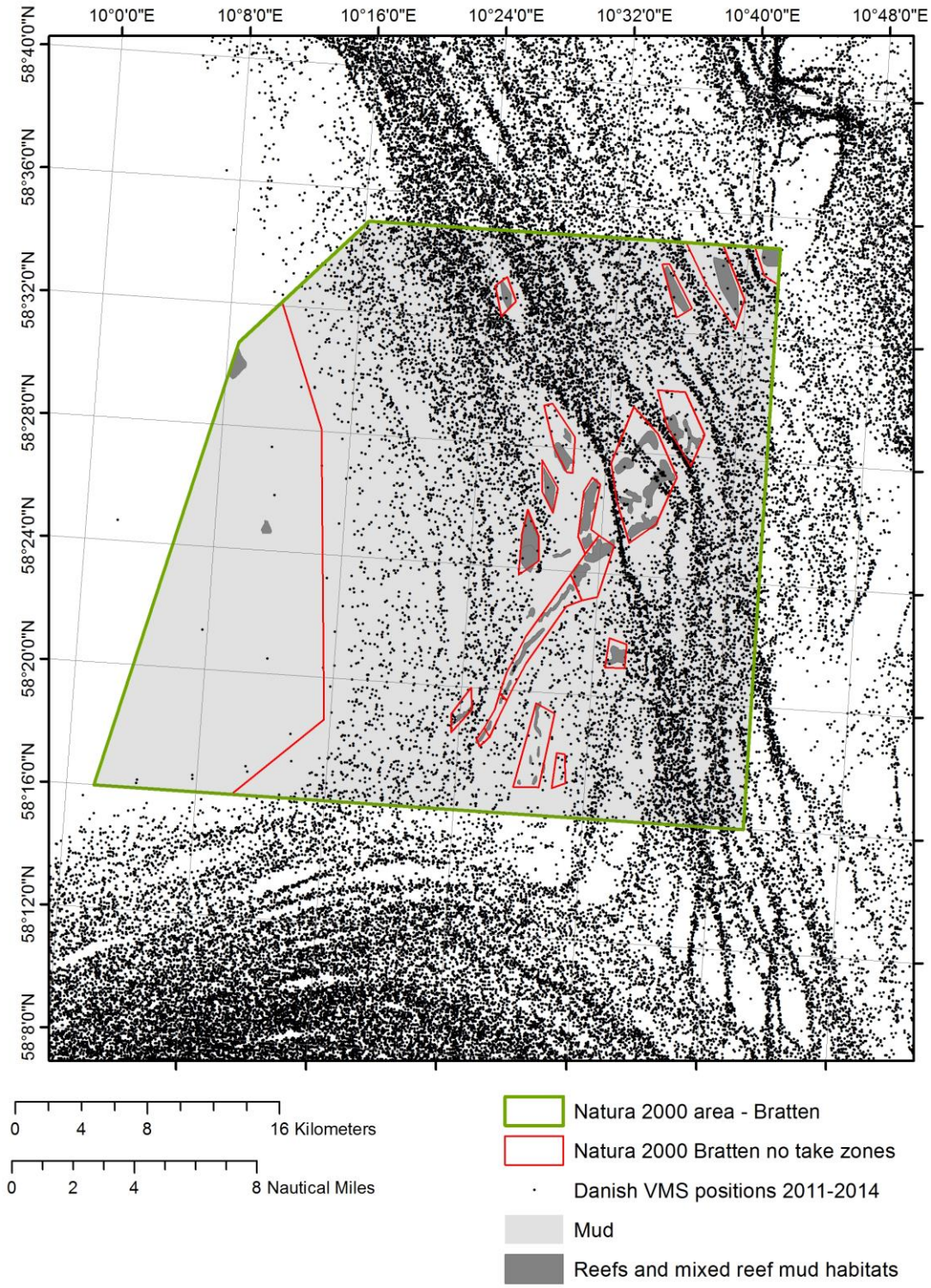


Figure 3.d Danish VMS positions during 2011-2014, focus on no-take areas

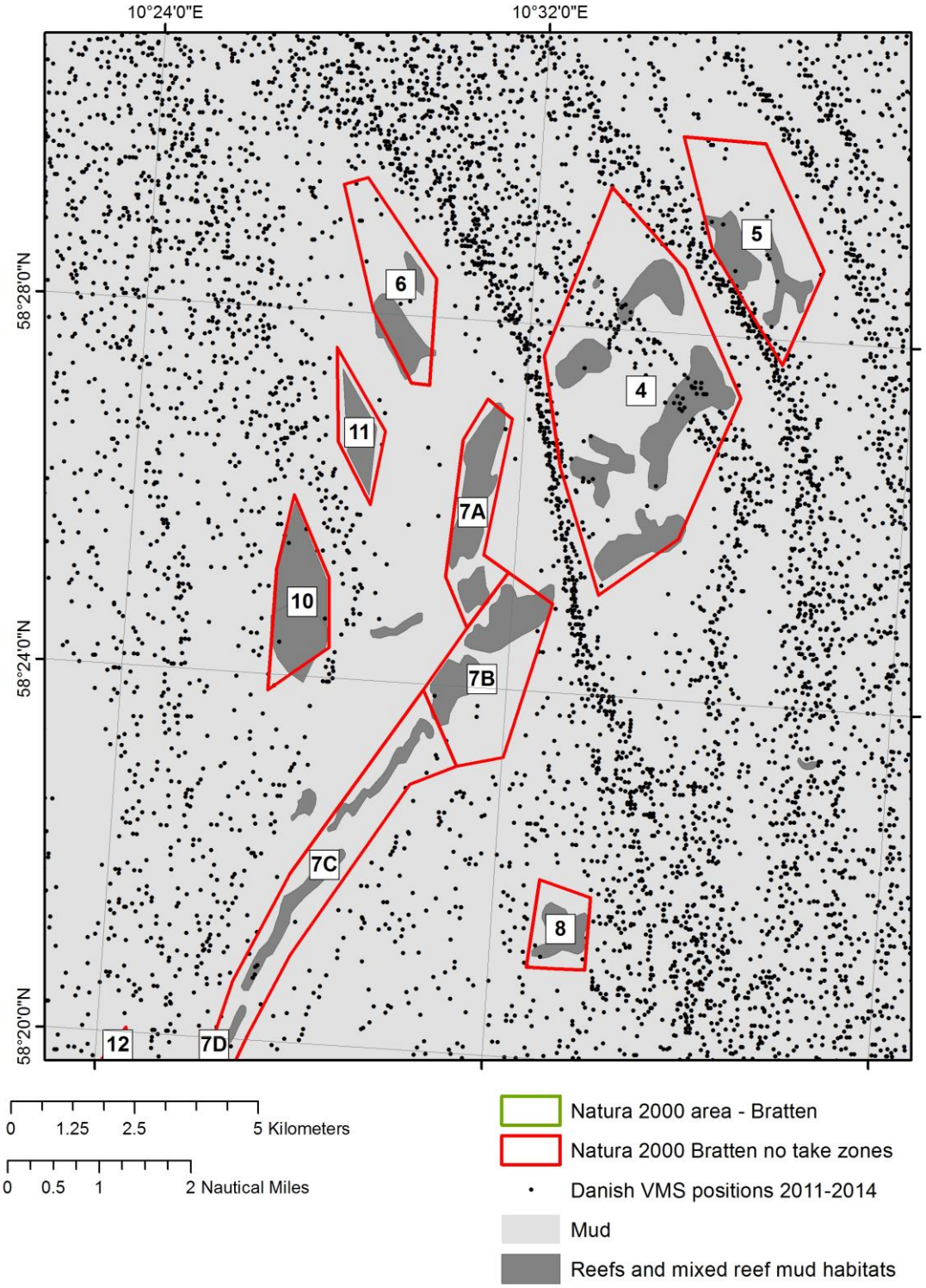


Table 3.1. *Swedish landings (kg) from the proposed no-take zones during 2011-2014.*

	kg				
Zone	**2011**	**2012**	**2013**	**2014**	**% - of total (4 years average)**
1	145	15			**<0.1**
2		32	45	9	**<0.1**
3	573	723	206	217	**0.1**
4	8 679	10 091	7 334	6 788	**2.1**
5	1 942	1 244	2 591	956	**0.4**
6	733	1 050	978	945	**0.2**
8	692	421	576	1 529	**0.2**
10	370	68	193	85	**<0.1**
11	236	155	133	162	**<0.1**
12	45	181	251	41	**<0.1**
13	189	175	156	355	**0.1**
14		180	342		**0.1**
7A	662	558	782	1 046	**0.2**
7B	619	474	793	832	**0.2**
7C	3 957	2 360	2 897	3 889	**0.8**
7D	256	151	282	178	**0.1**
7E	64		145		**<0.1**
9A	2 194	1 390	1 161	1 404	**0.4**
9B	986	1 037	1 141	1 232	**0.3**
Outside	426 407	376 637	306 234	380 539	**94.8**
Totalt	**448 747**	**396 941**	**326 239**	**400 206**	
% from no-take	**5**	**5**	**6**	**5**	

Table 3.2. *Value of Swedish landings (euro) from the proposed no-take zones during 2011-2014.*

	Euro				
Zone	**2011**	**2012**	**2013**	**2014**	**% - of total (4 years average)**
1	946	164			**<0.1**
2		318	531	78	**<0.1**
3	4 646	4 818	1 581	1 488	**0.1**
4	67 927	80 284	65 828	49 766	**2.3**
5	10 205	7 518	11 664	4 022	**0.3**
6	5 501	8 959	7 221	6 992	**0.2**
8	5 312	3 302	4 245	9 864	**0.2**
10	2 628	586	1 634	708	**<0.1**
11	2 036	1 219	1 534	1 300	**0.1**
12	422	1 495	2 218	222	**<0.1**
13	1 470	1 657	1 385	2 709	**0.1**
14		1 820	3 648		**0.1**
7A	5 466	4 687	7 246	8 428	**0.2**
7B	4 996	4 207	6 837	5 570	**0.2**
7C	31 434	20 448	25 404	27 728	**0.9**
7D	1 907	1 391	1 983	1 156	**0.1**
7E	501		1 373		**<0.1**
9A	16 894	10 569	8 472	8 939	**0.4**
9B	7 468	9 074	7 966	7 903	**0.3**
Outside	3 181 887	2 962 905	2 359 216	2 354 329	**94.5**
Totalt	**3 351 646**	**3 125 419**	**2 519 989**	**2 491 201**	
% from no-take	**5**	**5**	**6**	**5**	

Table 3.3. *Danish landings (kg) from the proposed no-take zones during 2011-2014.*

Zone	Kg				% of total (4-ys average)
	2011	**2012**	**2013**	**2014**	
1	348	55			**<0.1**
2		35	26	60	**<0.1**
3	863	900	444	239	**0.2**
4	150	2 443	4 848	3 628	**0.9**
5	481	482	892	1 718	**0.3**
6	89		57	733	**0.1**
8	3		612		**<0.1**
10		90		110	**<0.1**
11	51	91			**<0.1**
12		9	531	116	**0.1**
13			590	212	**0.1**
14	33	177	155	338	**0.1**
7A			61		**<0.1**
7B	13	497		105	**<0.1**
7C	30	112	886	656	**0.1**
7D				36	**<0.1**
7E					**<0.1**
9A	41		84	100	**<0.1**
9B	251	163	22		**<0.1**
Outside	119 667	235 557	457 372	434 609	**98.1**
Total	**122 021**	**240 610**	**466 578**	**442 659**	
% from no-take	**1.9**	**2.1**	**2.0**	**1.8**	

Table 3.4. *Value of Danish landings (euro) from the proposed no-take zones during 2011-2014.*

Zone	Euro				% of total (4-ys average)
	2011	**2012**	**2013**	**2014**	
1	2 090	141			**<0.1**
2		174	141	304	**<0.1**
3	3 712	2 848	1 287	659	**0.1**
4	1 182	12 960	20 448	15 652	**0.8**
5	2 417	2 806	3 976	5 340	**0.2**
6	280		212	3 113	**0.1**
8	61		2 346		**<0.1**
10		636		592	**<0.1**
11	200	274			**<0.1**
12		69	5 217	1 470	**0.1**
13			2 104	1 554	**0.1**
14	229	962	713	2 123	**0.1**
7A			189		**<0.1**
7B	162	2 068		1 149	**0.1**
7C	371	862	3 563	4 138	**0.1**
7D				53	**<0.1**
7E					**<0.1**
9A	463		497	528	**<0.1**
9B	1 168	1 262	153		**<0.1**
Outside	605 278	1 329 917	2 482 833	1 650 634	**98.1**
Total	**617 612**	**1 354 980**	**2 523 681**	**1 687 308**	
% from no-take	**2.0**	**1.8**	**1.6**	**2.2**	

Table 3.5.1 *Species landed (in kg) from the proposed no-take zones by Swedish fishery during 2011-2014.*

		Kg			
Common name	**Scientific name**	**2011**	**2012**	**2013**	**2014**
Tusk	*Brosme brosme*	53	56	55	19
Atlantic cod	*Gadus morhua*	2 448	2 124	1 611	2126
Witch flounder	*Glyptocephalus cynoglossus*	792	774	1 487	1076
Atlantic halibut	*Hippoglossus hippoglossus*	181	377	76	78
Anglerfish	*Lophius piscatorius*	238	374	410	311
Haddock	*Melanogrammus aeglefinus*	127	417	201	187
Whiting	*Merlangius merlangius*	54	13	18	10
Hake	*Merluccius merluccius*	106	54	58	30
Blue whiting	*Micromesistius poutassou*	104	71	0	4
Lemon sole	*Microstomus kitt*	4	5	12	8
Ling	*Molva molva*	152	111	88	71
Norway lobster	*Nephrops norvegicus*	134	187	89	35
Northern shrimp	*Pandalus boralis*	14 384	12 791	11 857	13238
European plaice	*Pleuronectes platessa*	62	91	202	107
Pollack	*Pollachius pollachius*	30	44	42	21
Saithe	*Pollachius virens*	3 277	2 754	3 684	2188
Rays	*Rajidae*	52	11	70	42
Redfish	*Sebastes Spp*	2	2	1	1
Cephalopods	*Loliginidae, Octopodidae*	2	2	3	3
Crustaceans	*Pandalus spp, Pasiphea spp*	52	18	10	103
Other		86	28	31	10
Total		**22 339**	**20 304**	**20 005**	**19 668**

Table 3.5.2 *Species landed (in kg) from the proposed no-take zones by Danish fishery during 2011-2014.*

		Kg			
Common name	**Scientific name**	**2011**	**2012**	**2013**	**2014**
Atlantic Cod	*Gadus morhua*	205	395	362	494
Atlantic Halibut	*Hippoglossus hippoglossus*	2	21	940	375
European Hake	*Merluccius merluccius*	11	15	12	26
European Plaice	*Pleuronectes platessa*	41	110	113	52
Haddock	*Melanogrammus aeglefinus*	18	174	272	261
Lemon Sole	*Microstomus kitt*	5	17	22	15
Ling	*Molva molva*	7	21	82	64
Monk	*Lophius piscatorius*	24	76	680	500
Northern shrimp	*Paudalus borealis*	1 090	2 842	3 195	3 656
Norway Lobster	*Nephrops norvegieus*	355	290	627	97
Picked Dogfish	*Squalus acanthias*	27	7		
Pollack	*Pollachius pollachius*	2	13	19	11
Rays + Skates	*Rajidae*	19	4	33	52
Saithe	*Pollachius virens*	413	523	1 339	1 073
Tusk	*Brosme brosme*			7	3

Whiting	*Merlangius merlangius*		8	23	5
Witch Flounder	*Glyptocephalus cynoglossus*	135	532	1 460	1 341
Unknown Species			2	4	2
Other		1	2	16	22
Total		**2 355**	**5 053**	**9 207**	**8 050**

Appendix 4. Effort and number of vessels for the Swedish and Danish fleets in the marine protected area Bratten, and landings in value (euro) and weight (kg) for Swedish fisheries not included in the analysis.

Table 4.1. *Total effort (hours trawled) deployed and number of vessels by the Swedish and Danish fleets in the marine protected area Bratten and the proposed no-take zones during 2011-2014.*

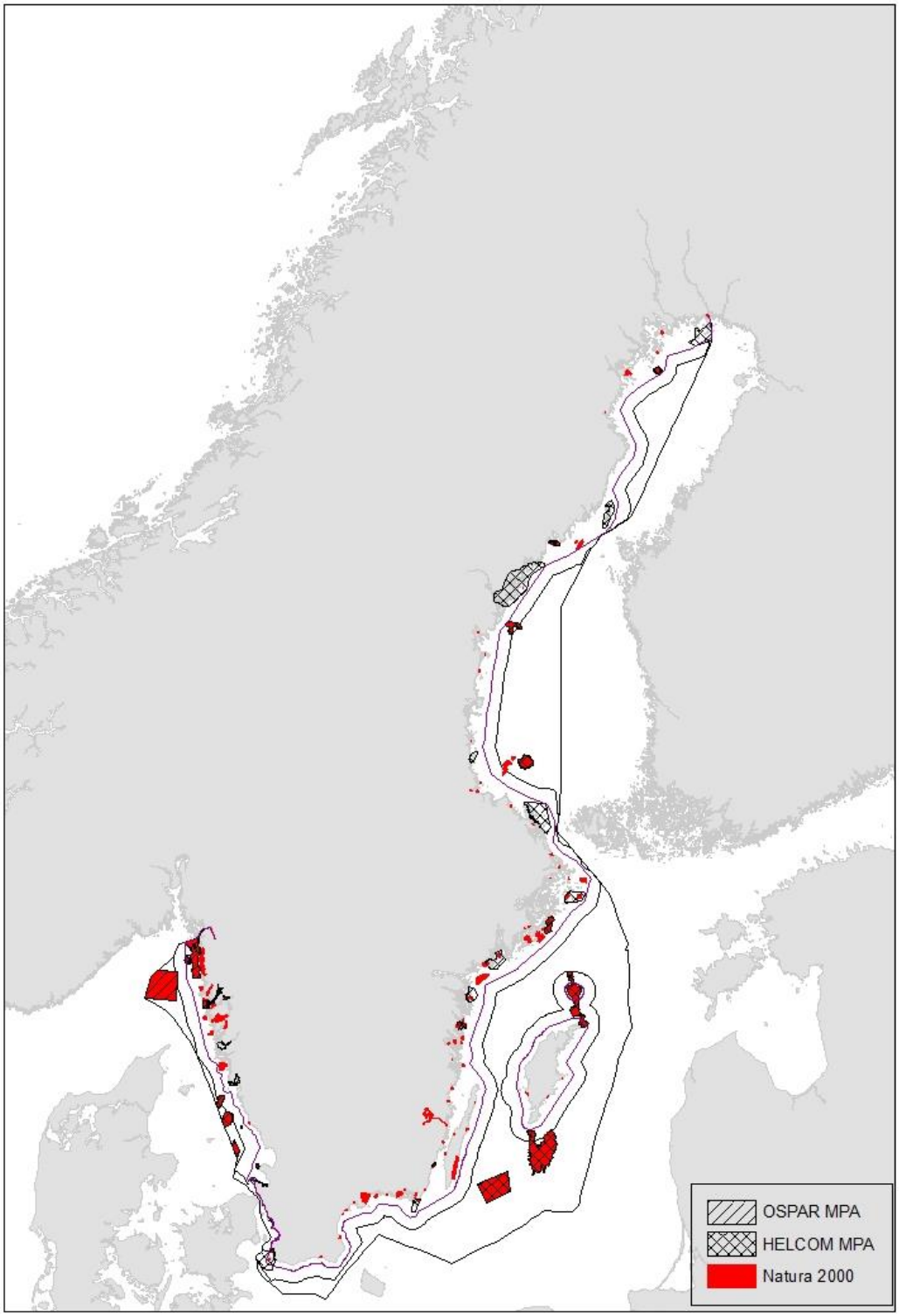
	Sweden				**Denmark**			
	2011	**2012**	**2013**	**2014**	**2011**	**2012**	**2013**	**2014**
Total effort (h) N2000	10864	10318	9152	10521	2098	4128	4913	3343
Total effort (h) in no-take zones	580	540	600	564	50	84	116	77
No. vessels N2000	41	41	47	41	38	40	33	25
No. vessels in no-take zones	33	32	31	30	16	22	17	14

Table 4.2. *Landings (kg) and value (euro) for Swedish vessels without VMS-signal and passive fisheries not included in the analysis but have been in the Bratten marine protected area during 2011-2014.*

	Euro				Kg			
Fleet	**2011**	**2012**	**2013**	**2014**	**2011**	**2012**	**2013**	**2014**
Gillnet, demersal fish	203				55			
Gillnet, mackerel	2 768	39 119	14 846	3 440	815	11 584	5 842	2 356
Hand/Pole line	340	1 808	379		100	557	168	
Creel, *Nephrops*	3 612	934	549		264	80	46	
Mixed demersal trawl	2 928	3 794	22 649	11 314	1 138	890	6 855	4 000
Nephrops trawl (grid)	3 694		1 014	1 891	270		85	160
Pandalus trawl	167 460	71 679	181 751	66 681	19 381	9 010	21 257	9 023
Pandalus trawl (grid)	161 849	42 463	5 522	7 330	15 994	3 965	473	816
Total	**342 853**	**159 796**	**226 708**	**90 656**	**38 017**	**26 086**	**34 726**	**16 355**

Appendix 5. Marine protected areas in Sweden

Figure 5.1. *Map of Swedish marine Natura 2000 sites, OSPAR and HELCOM MPAs*



Appendix 6. General legal framework of relevance for MSFD and the Habitats directive in Sweden

The purpose of this section is to describe the Swedish implementation of the MSFD and the necessary protective measures as set out in article 13.4 of the MSFD. Further, to clarify how such measures are created and that such measures can be based on regional sea conventions. Examples from the Swedish legislation and national processes are taken in order to ease the readers understanding of how the Swedish general legal frame works.[12] In several cases the national regulation and processes are similar or equal for MSFD requirements and requirements from the Habitats or Bird Directives.

Implementation of the MSFD in Sweden

In Sweden, the SwAM is responsible with regard to most of the tasks required by the MSFD. The SwAM performed the initial assessment, defined Good Environmental Status (GES), established environmental targets (see HVMFS 2012:18), established monitoring programmes and developed a proposal for a programme of measures.

The environmental targets set out in the MSFD were implemented through environmental quality standards pursuant to the Marine Environmental Ordinance (SFS 2010:1341). Environmental quality standards are a legally binding policy instrument following Chapter 5 of the Swedish Environmental Code and are applicable in marine waters.

Article 13.4 of the MSFD requires that spatial protection measures should be incorporated in the programme of measures. Spatial protection measures can consist of both establishment and enlargement of protected areas, as well as implementing new or stricter management measures in such areas.[13]

When implementing article 13.4 of the MSFD, Sweden did not find it necessary to transpose this article into a specific provision in the Marine Environmental Ordinance. The general legislative frame in the Swedish Environmental Code (complemented by, for instance, fisheries legislation including both EU- and national legislation) were found adequate in order to implement the necessary protection measures to meet the requirements of article 13.4 of the MSFD.

Sweden finds that the implementation of the MSFD and article 13.4 does not require the creation of a "MSFD-category of areas" in order to fulfill the obligations set out therein. If the existing categories of network of protected areas, including for example Natura 2000 sites and OSPAR- and HELCOM marine protected areas, are sufficient and adequate in order to fulfill the requirements established in article 13.4, there is no need to identify additional areas. However, if additional areas are required, the designation of Natura 2000-sites, OSPAR- and HELCOM MPAs or protection measures based on national criteria with the purpose of reaching GES, is in line with the requirements of Article 13.4. Moreover, Sweden has decided, in order to fulfill the Aichi targets, to increase the portion of marine

[12] This section does not include a comprehensive description of every aspect of the system. Thus, regulations for other activities such as gravel extraction or seabed mining will not be described, nor the procedure of appropriate assessments deriving from Article 6.3 of the Habitats Directive.

[13] See CIS-guidance on Programmes of measures under the Marine Strategy Framework Directive, Recommendations for implementation and reporting, (Final version). 25 November 2014).

protected areas to 10 percent of Swedish waters until year 2020. This measure will further enlarge the network of protected areas.[14]

Article 13.4 of the MSFD in the Swedish legal framework

The Swedish Environmental Code and the Ordinance regarding areas protected according to the Environmental Code (1998:1252), together comprise the basis for Swedish government agencies work with legal protection on valuable natural areas.[15] According to Section 16 of the Ordinance regarding areas protected according to the Environmental Code, authorities shall give priority to the protection of the areas listed in accordance to section 15. Within their powers and responsibilities, the authorities shall take such measures necessary or suitable having regarded the conservation interest on which basis the area has been listed. For SwAM this includes taking the needs of such areas into account when designing a programme of measure under the MSFD in order to reach GES until year 2020. According to the Marine Environmental Ordinance section 25 sub-paragraph 3 the programme of measure must be compatible with arrangements under, for example, regional conventions. The Swedish government can review the proposed programme of measures if not compatible with Marine Environmental Ordinance or the MSFD itself according to Marine Environmental Ordinance section 27. County Administrative Boards (CAB) also have a duty to give priority to the protection of the areas listed in accordance to section 15 and are instructed[16] by SwAM in the programme of measure (see CAB measure 2 below) to actively identify and propose spatial protection measures if considered necessary.

Regarding areas mentioned in the second paragraph of section 15, sub-paragraph 1-3, of the OAP (Natura 2000) the authorities shall, in addition to the previously described responsibilities, especially guard that a favorable conservation status is maintained or restored for the concerned habitats and species. Special consideration shall be taken to prioritized species and habitats.

When the CAB identifies a habitat that is deemed necessary to include in a network of protected areas, the CAB can, for example, create a nature reserve (see the Environmental Code Chapter 7 section 4). The area must be within Swedish territorial waters and the required limitations on the right to use the area must be stated. If the area is outside territorial waters or the CAB finds it appropriate, the CAB can notify the government and propose that the area shall be pointed out as a special protection area in accordance with the Environmental Code Chapter 7 section 27. Sweden can announce the area to OSPAR or HELCOM if deemed adequate. Also SwAM and other agencies can notify the government on such areas.

The CAB can notify SwAM if regulation of fisheries are required (see Fisheries Act [1993:787] section 20 and Fisheries Ordinance [1994:1716] Chapter 2 section 12).

[14] See Swedish legislative history, prop. 2013/14:141 p. 95 ff.

[15] See also Section 2.3 Designation of Natura 2000 sites (Chapter 7 section 27-28 of the Environmental Code)

[16] The instruction is not binding but authorities are in general obliged to assist each other and are expected to follow instructions.

The legal tools included in the Environmental Code, the Ordinance regarding areas protected according to the Environmental Code and the fisheries legislation are thus sufficient in order to fulfill the obligations regarding the designations and protection of marine protected areas, both under MSFD and the Birds and Habitats Directives.

The Swedish Programme of measures for the marine environment

The SwAM has developed a programme of measures for the marine environment pursuant to the Marine Environmental Ordinance. This includes a programme of measures established under Article 13 of the MSFD. The programme of measures will be adopted in early 2016. Thus, it will be in force when the joint recommendation for measures in the Bratten-area is planned to be finalised.

The SwAM proposes a total of 32 measures within the thematic areas of

- non-indigenous species,
- fish and shellfish which are impacted by fishing,
- eutrophication,
- permanent alteration of hydrographical conditions,
- hazardous substances,
- marine litter,
- biological diversity,
- marine protected areas and marine restoration.

The draft programme of measures under the MSFD includes existing and new measures. New measures are those which have been identified in the programme of measures as being necessary to achieve or maintain GES in marine waters by 2020 when existing measures are not considered sufficient. The new measures contribute directly or indirectly to attaining the improvement needs which comprise the difference between the current environmental status and the Swedish environmental quality standards. The measures address national authorities, CABs and municipalities.

Measures for marine protected areas:

Sweden has adopted a target of protecting 10 percent of the marine environment by 2020, in an ecologically representative and functioning network of marine protected areas. Notably, existing measures include a National plan for developing marine spatial protection in Sweden to be developed in 2016.

New measures proposed include:

• SwAM 17: to develop guidance for the content of management documents for protected marine areas.

• County administrative boards 2: based on guidelines and criteria developed in SwAM's national plan for developing marine spatial protection in Sweden, to establish new marine protected areas with an adequate geographical scope, and including appropriate conservation measures in order for the new areas to help reaching good environmental status in accordance with the Marine Environmental Ordinance.

• County administrative boards 3: to introduce conservation measures in marine protected areas (existing/new, where such measures do not currently exist).

Appendix 7. Overview of the 11 information items in the Commission guidelines from 2008

The table below gives an overview of how the present proposal has covered the 11 information items of the Commission´s guidelines from 2008 concerning development of proposals for fisheries management measures in marine Natura 2000 within the scope of the CFP.

	Section
1) Comprehensive description of the natural features including distribution within the site.	3,6
2) Scientific rationale for the site's selection in accordance with the information provided in the Natura 2000 data form. Intrinsic value of its features. Specific conservation objectives.	4, 6.2
3) Basis for the spatial extent of the site boundary clearly justified in terms of conservation objectives.	4, 9.2
4) Threats to habitats and species from different types of fishing gear. List of other human activities in the area that could damage the habitats.	8
5) Fleet activity in the area and in the region, distribution of fleets (by nation, gear and species), and information on target and by-catch species, all over the last 3 years.	7
6) Seasonal trends in fisheries over the last 3 years.	7.1
7) Proposed fisheries management measures to maintain the habitats features in favourable condition. Are they proportionate and enforceable? Other conservation measures that apply to the area.	9
8) Control measures envisaged by the Member State, possible ecological and control buffer zones to ensure site protection and/or effective control and monitoring measures.	4, 9.3
9) Measures to monitor and assess the maintenance and/or recovery of the features within the site.	10
10) Coordination with neighbouring Member States as appropriate.	5
11) Evaluation of possible displacement of fishing effort and impact on new areas.	9.5

Appendix 8. Overview of formal and informal consultations

Date	Consultation	Participants
May 2012	First meeting presenting the marine protected area Bratten.	Representatives from Swedish and Danish commercial fisheries, the Danish AgriFish Agency, the Norwegian Directorate of Fisheries, the University of Gothenburg, the Swedish University of Agricultural Sciences, the County Administrative Board of Västra Götaland and the Swedish Agency for Marine and Water Management.
June 2012	A meeting aimed at discussing conservation needs in the marine protected area Bratten in relation to recreational fisheries, both commercial fishing trips and other recreational fisheries.	Representatives from the Swedish Anglers' Association, the County Administrative Board of Västra Götaland and the Swedish Agency for Marine and Water Management.
December 2012	Discussion on conservation needs in relation to recreational fisheries in the marine protected area Bratten	Representatives from the Swedish Anglers' Association, the County Administrative Board of Västra Götaland and the Swedish Agency for Marine and Water Management.
January 2013	Discussion of state of play in relation to Natura 2000 and sites located in the Kattegat-Skagerrak area and other marine protected areas	Representatives from the Danish AgriFish Agency and the Swedish Agency for Marine and Water Management.
January 2013	Discussion on possible conservation measures concerning commercial fisheries	Representatives from Swedish and Danish commercial fisheries, the County Administrative Board of Västra Götaland and the Swedish Agency for Marine and Water Management.
February 2013	Information at a public meeting concerning the marine protected area Bratten and proposed conservation measures.	Members of the Swedish Anglers' Association and the Swedish Agency for Marine and Water Management.
March 2013	Discussion on possible conservation measures concerning recreational fisheries at a workshop aiming for a sustainable use of the	Representatives from Swedish and Danish commercial fisheries, NGO´s, Members of the Swedish Anglers' Association, the County

	marine protected area Bratten discussing the proposed and additional conservation measures.	Administrative Board of Västra Götaland and the Swedish Agency for Marine and Water Management.
October 2013	The proposed conservation measures were out on a public hearing during the autumn 2013.	Response was given by organizations representing Swedish and Danish commercial fisheries, the Swedish Anglers' Association, the Danish AgriFish Agency, the Swedish Coast Guard, WWF, the Swedish Society for Nature Conservation, Oceana, the Swedish Species Information Center, the municipalities of Sotenäs, Tanum and Strömstad (Tillväxt Norra Bohuslän)
August 2015	Dialogue meeting concerning fisheries conservation measures in the marine protected area Bratten	At the meeting the proposal for Bratten was discussed. Both representatives from professional fishermen and NGOs were invited. The NGOs stressed that they were invited late in the process and didn´t have the same possibility to influence the proposal. The fishermen considered the consultation process appropriate. See appendix 9.6
September 2015	Pre-consultation meeting	See appendix 9.1
October 2015	First Ad-hoc meeting	See appendix 9.2
November 2015	North Sea Advisory Council, Skagerrak-Kattegat Working Group	A presentation on the proposal for fisheries conservation measures in the Marine Protected Area Bratten, was made. Following the presentation there was a discussion. In the discussion the chair argued for the need of a corridor in area 4. The Danish administration had forwarded a letter from the Danish fishery, in which this information was included. SwAM underlined that the proposal on Bratten, including area 4, was a compromise developed in close collaboration with representatives from the Danish and Swedish fishery

		sector. SwAM further clarified that area 4 needs to be closed in order to fulfil Union environmental obligations within the Common Fisheries Policy (article 11). It was stated that the proposal is the result of a complex County Council Administrative Board process and that the proposal, as the compromise it is, is acceptable.
November 2015	Second Ad-hoc meeting	See appendix 9.3
December 2015	Third Ad-hoc meeting	See appendix 9.4
January 2016	Fourth Ad-hoc meeting	See appendix 9.5

Appendix 9. Reports and minutes from meetings

9.1 Minutes from Pre-consultation meeting 10 September, 2015

2015-30

Minutes from Pre-consultation meeting on the Natura 2000 site Bratten

10 September 2015 at the Swedish Agency for Marine and Water Management (SwAM)

1. Introduction and presentation of the agenda

Ingemar Berglund, Director Department for Fisheries Management, chaired the meeting.

Participants presented themselves and their organization (Annex 1).

DE expressed that they are in a more or less similar stage introducing fisheries management measures in their MPAs.

COM asked about the responsibility of the species and habitats directive in Sweden. SEPA (Swedish Environmental Protection Agency) has the main responsibility for these directives and SwAM has shared responsibility for aquatic parts.

2. Process so far and ongoing process; coordination in accordance with Articles 11 and 18 of the Basic regulation and the ToR for the Scheveningen

DK: Why is the deadline for the mandate from the Government set to 1 of March? **COM**: Try to ensure a possible coordination of the submission of the joint recommendation with an upcoming STECF plenary meeting.

SE: The dead-line was set with due regard to a will of not postponing the submission too much but at the same time letting some time pass before the launching of the sixth months period from the provision of sufficient information.

SE: We should try to co-ordinate the submission of the joint recommendation with an upcoming STECF meeting.

DE: Non paper on the Commissions 11-item guidelines from 2008 was said to be updated, but it has not. **COM**: rather than updating the published guidelines, COM DG MARE gave a presentation with explanations about Articles 11 and 18 of Regulation 1380/2013 for both the environmental and fisheries expert groups

DK: Has the relevant NGOs and ACs been informed? **SE**: Yes, a copy of the invitation with the proposal has been sent out to both NGOs and NS AC on the 1st of July 2015. On the 14th of August, SwAM invited stakeholders including NS AC to a stakeholder meeting on the 28 of August 2015 at the Swedish Agency for Marine and Water

Management. Both environmental NGO:s and NGO:s from the fishery industry joined the meeting. NS AC did however not participate in the meeting.

3. Presentation of the Swedish proposal for fisheries management measures in Bratten. Conservation targets, threats and proposed measures

DK: Why are all commercial fisheries including pelagic fisheries banned in the no-take zones? It is important to justify the measures. There is a risk that this may be precedential. **SE**: Mainly for control purposes, but pelagic species (saith for example) living close to the bottom can have an impact on the ecosystem of the habitats and therefore the catch of these species can have an impact on the quality of the conservation target.

DE: It is important that the measures proposed are clearly linked to the target.

4. Fisheries in the concerned area

DK: The rationale behind the bufferzones needs to be developed in the proposal. **SLU Aqua** explained the rationale behind the buffer zones and confirmed that this could be further developed in the text.

5. Control and enforcement

DK: There is a danger in combining the use of AIS as a tool for control, as it was intended as a security tool from the beginning. If fishermen turn off the AIS this could result in an increased risk for accidents at sea. The chapter on control needs to be developed in the proposal. In the presentation today, several tools for control were presented and this is not clear in the proposal. In Denmark, when looking at the fishing patterns there is a difference in the areas that were closed for bottom-trawling compared to the patterns prior to the ban.

COM: Will the AIS be mandatory also for boats smaller than 15 meters? **SE**: Yes, all boats fishing in the area.

COM: Are there resources enough for this future control? **SE**: The Swedish Coast Guard is now under a reorganisation. It is difficult to answer before everything is settled. But a risk based control will enable a prioritization of control measures.

COM: Are these tools for control (from the desk, based on AIS records) enough to raise a case of infringement? **SE**: The Swedish District Court (which is the court of first instance, not the higher level) has in several cases sentenced fishermen for offences against the fisheries legislation to fines, based merely upon VMS-data showing information about the fishing vessels' position and activity. The court has thus considered VMS data as sufficient evidence for conviction. However, the outcome of any future court cases will depend i.e. on the objections from the fishermen in the particular case.

SE: In the presentation SwAM developed the thinking on risk based control – this will be included in the draft proposal.

6. Discussion

DE: According to the Common Fisheries Policy a member state with direct management interest could be seen as one having fishing opportunities in the concerned area. The Bratten area is located in the ICES area III A and several member

states have a quota for several species listed. We think that this could be interpreted as enough to qualify for having direct management interest. DE has fishing opportunities in the concerned area and will get back with an answer stating if Germany will be a concerned member state.

COM: In accordance with Article 11, it is the task of the Member States to determine which MS have direct management interest in the area. A good way of handling this could be to ask member states themselves to come up with an answer if they qualify and why as a concerned member state. However, if the notion of concerned member state is interpreted in a too broad way it might imply that member states leave the process and in that way could hinder the submission of a joint recommendation.

DE: In earlier processes there has been a possibility to abstain without hindering a submission of a joint recommendation.

DK: Recommends that SE changes the proposal and separate the Natura 2000 habitats from other conservation targets within OSPAR. DK also wants the proposal to be developed with the definition of the habitats.
SE will develop the definition of habitats. Concerning the link between OSPAR/MSFD and the Common Fisheries Policy, SE will develop the text further.

COM: It needs to be clear what the added value of the proposed measures is. In other words, could the MS comply with their environmental obligations without the adoption of the fisheries measures in question? Normally, a set of measures are required to protect a given marine environment, including a range of actions from various fields, such as transport, energy, military, etc. This would also be beneficial to be developed in the proposal.

DE: Is the proposal including no-take zones or closed areas? Or is it aimed at a ban on bottom-contacting gear? You need to clarify the link between the stress on the target related to the impact from the fishing gear.

SLU Aqua explained the rationale behind the no-take zones in relation to pelagic fisheries and the risk of by-catches of predatory fish when fishing at various depths. This will be further developed in the draft proposal.

DK: Danish fishermen would like to have data from 2014 included in the proposal.

SLU Aqua: Even if we include data from 2014 there will be very limited changes in fishing patterns and landing data which would not change the perception of the commercial fishery in relation to the conservation targets. During the process, the data has already been updated and scrutinized by managers and fishermen in several steps. And at the same time an update would be costly and time consuming

DK: The section on control needs to be developed according to the presentation and discussions from today. **SE** once again confirmed that this part will be developed in the draft proposal.

DK: Denmark posed a question to the commission; for upcoming processes; how does one deal with member states not participating in the processes but having direct management interest?

COM: Sweden has found a good way of dealing with this by demanding answer from the member states that they should, by a certain date, answer if they do or do not have direct fisheries management interests in the area. As we heard earlier, France has already answered that they do not, but that they want to be informed in the process.

7. Conclusion and further steps

The chair concluded the meeting. The meeting contained good discussions and concrete development proposals. Upcoming dates for ad hoc groups will be sent out again and confirmed. Denmark is also initiating a new process on seven MPAs and hopefully this process will start, back-to-back with the ad-hoc group meeting for Bratten on the 21 October.

Annex 1:

Participants:

Danish AgriFish Agency

Ms. Anja Gadgård Boye

Ms. Pernille Birkenborg

Federal Ministry of Food and Agriculture, Germany

Mr. Bruno Hoffstadt

European Commission

DG Maritime Affairs and Fisheries

Ms. Marta Janakakisz

Swedish Coast Guard

Mr. Andreas Jönsson

Swedish University of Agricultural Sciences, Department of Aquatic Resources - Institute of Marine Research

Mr. Mattias Sköld

Mr. Håkan Wennhage

Mr. Andreas Wikström

Swedish Agency for Marine and Water Management

Mr. Ingemar Berglund

Ms. Elisabet Thompson

Ms. Lena Tingström

Ms. Malin Wilhelmsson

Ms. Märta Zetterberg

9.2 Minutes from ad-hoc meeting 21 October, 2015
2015-11-10

Minutes from the first ad-hoc group on the Natura 2000 site and OSPAR MPA Bratten

This was the first meeting in the established ad-hoc group which was mainly focused on principal issues that were raised at the pre-consultation meeting the 10 of September 2015. Prior to the ad-hoc group meeting, a revised version of the draft proposal on Bratten was forwarded to the concerned parties.

The meeting took place at the Swedish Agency for Marine and Water Management (Havs- och vattenmyndigheten) in Göteborg the 21 October 2015.

1. Welcome by The Swedish Agency for Marine and Water Management

- Chair Malin Wilhelmsson made an introduction and presentation of the agenda. Participants presented themselves and their organization (Annex I).

The chair explained that the agenda is linked to the pre-consultation meeting on the 10 of September and the discussions that were held at the meeting. Some principle issues:
- Process
The chair referred to the ToRs for the Scheveningen/North Sea FISH/ENVI technical expert group and the fact that there is a clear mandate for formation of ad-hoc groups. It is stated, among other things, that Member States will make the best endeavors to agree to a joint recommendation in the ad-hoc group. So far, Denmark and Germany have declared themselves as having direct management interests in Bratten. No other Member State has shown interest in participating in the process. France has requested to receive information of the ongoing process.

The question of the provision of sufficient information and the six months limit was raised. The question will be raised again at the next ad-hoc group meeting.

The chair gave an update on consultations undertaken since the pre-consultation meeting 10 of September 2015;

- Bratten was brought up by the French chair at the high level Scheveningen meeting in Paris on the 7 October 2015.

- A presentation on Bratten was made at the intercessional working group on OSPAR MPAs in Lisbon 13-15 October 2015.

- A presentation is planned to take place at the next NSAC, Kattegat-Skagerrak working group, on the 13 November.

As a general introduction, the chair brought up the question whether this or other processes would be precedential in upcoming processes. This question was brought up already by Sweden when going through the regional process with the Danish proposals which are now published in a delegated regulation. In this process, Sweden underlined that the Danish approach should not be regarded as precedential for other conservation measures regarding fisheries initiated by other Member States. It was also said that other Member States will propose measures in accordance with their perception of necessary actions to be taken in relation to the implementation of the Habitats Directive and protection of marine habitats and species from fisheries. The ad hoc group agreed upon this point referring to the basis of the articles 11 and 18. This was included in Annex F *Summary of outcome of the regional coordination process* included in the final proposal for fisheries management measures in Danish Natura 2000 sites in the Kattegatt/North Sea which was sent to the European Commission.

In other words, one Member State might have restrictions due to their national administration that could make them obliged, or give them the possibility to choose a certain way of handling the process that might not follow other MS interpretation of applicable legislation and necessary actions to be taken, all according to the basis of articles 11 and 18.

Conclusion: It was agreed that this or other processes would not be precedential in upcoming regional processes. Each Member State will propose measures in accordance with their perception of necessary actions referring to the basis of the articles 11 and 18.

2. National processes so far

We kindly asked DK and DE to present any national process concerning Bratten and possible outcome of national stakeholder consultation

- Germany has submitted the proposal to the German Fishermen Association (Deutscher Fischereiverband – DFV) and has given them the opportunity to deliver comments by the end of November 2015. The DFV is representing the German catching sector; however, bearing in mind that German fishery activities have not been registered in the relevant area.

- Denmark has already forwarded the comments from their NGOs for information (Danish Fishermen PO and the Danish Concervation Society). WWF DK has not yet sent any comments. Members of the Danish Natura 2000Dialogue Forum have been informed. At this meeting, Denmark made a presentation of the comments received so far from theirs NGOs. In Denmark, the formal consultation process includes the proposal going to the Ministers´ Committee (including NGOs) then to the Parliament.

Timeframe – a draft Joint Recommendation will probably need one month to go through the Danish formal internal process.

Conclusion –The group agreed upon that the formal process should be that the Member State concerned has a possible dialogue with its national stakeholders and NGOs and take onboard those comments it finds relevant and if necessary include them in its national comments.

3. Discussion

- Scientific advice

- The rationale and principles of the proposal has been peer reviewed by SLU Aqua. SLU Aqua has also contributed with analysis on fisheries and fisheries landings as well as scientific references. Denmark proposed to add a section on how the scientific advice has been used.

Conclusion: According to the Danish proposal, a section will be added in a third draft. There is also a need to explain the relation between the ICES advice on buffer zones and the buffer zones proposed in Bratten.

- No take areas – Pelagic fisheries

- Denmark pointed to the fact that the previous consultation, at regional level, did not include no-take zones, but rather focused on measures concerning bottom-contacting gear. As in the pre-consultation meeting there was a discussion concerning the need for a direct link between the proposed measure and the target/ aim.

  The chair introduced the issue by referring to article 11.1 in the CFP, where there is a reference to article 2 where it is stated that the CFP shall apply the precautionary approach and that the CFP shall implement the ecosystem-based approach to fisheries management.

  There are two aspects on no take zones in this context, one concerning the conservation target, the other relates to the control and enforcement. There are only a few fishing gear, even within the pelagic fishery, with no risk of harming the conservation targets in the Bratten area with an underwater landscape characterized by deep canyons. From a control and enforcement point of view, restricting real-time-surveillance to only one specific fishery, e.g. only demersal trawlers, will prove to be problematic as information regarding type of gear is not associated with a VMS or AIS position. Consequently, distinguishing between vessels on the basis of gear type in real time proves to be very problematic. Moreover, gear type is not necessarily unique for a vessel which can complicate matters further.

- **Conclusion**: Germany will not object to the no-take zones. Denmark most likely will go along with Germany, but will need a more in depth justification for the no-take zones. This could include: what is the expected output, what will the added benefit be concerning for example the ecosystem.

- **Common Fisheries Policy, Habitats Directive, Marine Strategy Framework Directive, OSPAR convention**

The link between CFP, Habitats Directive, Marine Strategy Framework Directive and the OSPAR convention was brought up already at the pre-consultation meeting, where Denmark pointed out the issue of Bratten not being a "MSFD protected area". It is not clear to Denmark how Sweden is linking Bratten to MSFD. For Denmark, the CFP cannot be used as an instrument to protect OSPAR habitats and species, unless there is a direct link to MFSD. Swedish legal advisors therefore updated the proposal clarifying the links referring to the Swedish way of implementing the MSFD and the possibility of establishing a representative network of marine protected areas. Sweden explained that a MSFD tool for MPAs has not been implemented in our national legislation and Sweden therefore does not has the same possibilities as Denmark in establishing "MSFD-protected areas". Instead Sweden uses the OSPAR and HELCOM-listed species and habitats as a tool to establish a representative network of MPAs.

Conclusion – Further clarifications will be made in the proposal.

4. Control and enforcement

A principle issue at the pre-consultation meeting was the proposal on mandatory use of AIS as a complement to VMS. SwAM accordingly updated the draft proposal in order to clarify those issues. During the meeting control experts elaborated on some more benefits in using AIS compared to only VMS in the Bratten area. Technical questions were raised by both Germany and Denmark and these were clarified by the control experts. Answers were given concerning the possible frequency of the VMS signals. According to the provider of VMS systems, they do not recommend higher frequency than 15 minutes, and even with that frequency, these relatively small no-take areas will be impossible to control. Questions were raised if the AIS system will be possible to use this far out at sea. This was clarified – as long as the mast is four meters above the surface the signal reaches land.

- Germany is questioning how these small areas will be possible to control. In Germany there are flat rates for VMS. However, it was clarified that this does not apply in Sweden.

- Denmark sees a need for the chapter on control and enforcement to be further developed; the whole Swedish system for control, and the entire "Swedish model", should be described in the proposal.

- Germany asks if the proposed system for control will be enough for a case in court. In Sweden a number of cases have proven to hold in court, at least for VMS. The Swedish District Court (which is the court of first instance, not the higher level) has in several cases sentenced fishermen for offences against the fisheries legislation to fines, based merely upon VMS-data showing information about the fishing vessels' position and activity. The court has thus considered VMS data as sufficient evidence for conviction. However, the outcome of any future court cases will depend case.

Conclusion: With a more elaborated description of the Swedish model for control there is an acceptance of proceeding with the demand for mandatory AIS as a complement to VMS as a control tool.

5. AOB

Sweden has received comments on the proposal from the Commission, DG ENVI, which have been forwarded to concerned parties.

- Denmark informed the group that they had similar questions from DG ENVI during their previous process. Denmark asked if there have been any other comments than those from the pre-consultation meeting from DG Mare. No further comments have been sent from DG Mare at this point.

  Germany presented some of their ongoing work. In the North Sea, EEZ, they are working with a proposal on two Natura2000 sites, SCI (i.e. Borkum Riffgrund and Sylter Außennriff, for a third SCI – the Dogger Bank –D,UK and NL are developing a joint proposal), and one Natura 2000 site, SPA. This work is undertaken by the Ministry of Environment and Nature Conservation and the Ministry of Agriculture. In these sites SCI approx. between 50 and 100% will be protected by a ban for mobile bottom contacting fishing gear. One relatively small sub-area will be totally closed for fisheries. There will be restrictions on gillnet use for the protection of harbor porpoise and seabirds. Germany has an ambitious roadmap for this work. Questions were posed on when pre-consultation meetings will take place. So far, Germany had no specific dates set.

  Denmark presented their ongoing work on seven sites in the Baltic and the North Sea. Denmark will use the same proceeding as Sweden did when it comes to concerned member states; that is, asking all member states who is "concerned". The proposal is now with the minister who will examine how this proposal coincides with other MPAs. There will probably be an approval within the coming weeks and the pre-consultation meeting will hopefully be held in Copenhagen on the 9 December 2015.

6. Way forward

- Principal issues have been addressed in this meeting, and a roadmap for developing the proposal for acceptance has been discussed.

- Minutes will be forwarded to all participants for approval.

- Next ad-hoc group meeting will be held in Göteborg the 18 November 2015 where the proposal will be examined in detail. Another ad-hoc group meeting will be held in Copenhagen on the 9 December 2015

Annex 1. List of participants

Danish AgriFish Agency
Ms. Anja Gadgård Boye

Federal Ministry of Food and Agriculture, Germany
Mr. Nikolaus Probst

Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany
Mr. Christian Pusch

Swedish University of Agricultural Sciences, Department of Aquatic Resources - Institute of Marine Research
Mr. Håkan Wennhage
Mr. Andreas Wikström

Swedish Agency for Marine and Water Management
Ms. Lena Tingström
Ms. Viktoria Wendschlag
Ms. Malin Wilhelmsson
Ms. Märta Zetterberg

Participation during point 4 – control and enforcement)
Mr. Mats Börje
Mr. Jonas Ericson

9.3 Minutes from ad-hoc meeting 18 November, 2015

2015-11-16

Minutes from the second ad-hoc group meeting, on the marine protected area Bratten

This was the second meeting in the established ad-hoc group. Prior to the ad-hoc group meeting, a revised version of the draft proposal on Bratten was forwarded to the concerned parties and the meeting was focused on the third draft proposal on Bratten.

The meeting took place at the Swedish Agency for Marine and Water Management (Havs- och vattenmyndigheten) in Göteborg, the 18 November, 2015.

1. Welcome by The Swedish Agency for Marine and Water Management

- The chair made an introduction and presentation of the agenda. Participants presented themselves and their organization (Annex I).

The chair underlined that the agenda is focused on a scrutiny of the proposal, since the group already had agreed on principle issues like AIS as a complement to VMS, no-take zones and the link between the Common Fisheries Policy, Habitats Directive, Marine Strategy Framework Directive and the OSPAR convention and the national environmental code. However, DK has requested further clarification concerning the last point (*the link between the CFP and concerned directives).*

The chair also raised the issue of provision of sufficient information – six months limit according to the Common Fisheries Policy (article 11.3). It was decided that this would be discussed in the end of the meeting.

2. General update on the proposal and process

The chair gave an update from the presentation at the NSAC meeting 13 November 2015. At the meeting there were participants from DK, DE and SE fisheries sectors, Oceana, Environmental Defense Fund, Swedish Anglers´ Association representing also the European Anglers 'Association, Swedish University of Agricultural Sciences, Department of Aquatic Resources - Institute of Marine Research, Swedish and Danish administration. A presentation on Bratten was made, focusing on the process and the proposal. There were comments from the Danish fisheries declaring that area 4 would need a corridor following Danish trawling tracks. However, SE clarified that the area 4 needs to be closed to achieve conservation objectives and that the zonation of the no-take zones is a compromise between conservation and fisheries interests. At the meeting no comments on the principle of no-take zones or mandatory use of AIS as a complement to VMS were raised.

3. Discussion

Scrutiny of the proposal

The proposal was scrutinized page by page taking into account Danish comments and questions. Many of those were resolved by the changes that had been made in the third draft. For example the chapter on control and enforcement was accepted. The following issues remains to be dealt with:

- **Common Fisheries Policy, Habitats Directive, Marine Strategy Framework Directive, OSPAR convention**

  The text concerning the link between the Common Fisheries Policy, Habitats Directive, Marine Strategy Framework Directive and the OSPAR convention and the national environmental code has been thoroughly developed in the third draft. The explanatory section, aiming at clarifying the Swedish approach, was decided to be put in a separate appendix to the proposal. **COM** clarified that, in the proposal, after having explained the Swedish way of implementing the Marine Strategy Framework Directive etc., it should be enough with a simple reference to MPAs (and no need to keep all references to NATURA 2000 and OSPAR MPA in the headings for example).

- **Fishery data**

  DK requested that 2014 fishery data for Danish fishery should be compiled and included in the proposal. A discussion followed in which it arose that this demand had not been forwarded earlier as a Danish request, but rather a request from Danish fisheries. However, it was decided that the proposal would be updated with fisheries data also including data from 2014. SLU and DTU will make proper arrangements for this.

- **National monitoring program**

  The chair clarified that a section on the national monitoring program will be included in a fourth draft.

- **No-take zones**

  The chair presented a new text on no-take zones since Denmark had requested a more in depth justification for the no-take zones. COM underlined in this context that the measures proposed must have an effect. If the measures proposed are justified within the re-cautionary approach this must be clear in the proposal. The chair confirmed that the text will be further developed in this direction.

4. Provision of sufficient information – six months limit according to the Common Fisheries Policy

The chair raised the issue of provision of sufficient information and the six months limit according to the Common Fisheries Policy, aiming at deciding on the time period to start from the date of today's meeting. This should be coordinated with DE in a written procedure, since Germany was unable to attend the ad-hoc group meeting. However, DK saw a need for additional information concerning fisheries data for 2014 and for further clarifications on the link between CFP, Habitats Directive, Marine Strategy Framework Directive and the OSPAR convention.

5. AOB

COM clarified that everything that is to be regulated in a delegated act must be included in the joint recommendation. For example if there is a need for the fishing

gear to be secured on the fishing vessel when passing through a no-take zone, this has to be included in the joint recommendation.

Coordination with STECF meetings
When delivering a joint recommendation **COM** pointed out that it would be helpful if the JR is submitted in time to be scrutinized by STECF.

Danish process
DK informed that there is a need for postponing their upcoming process, and they are not able to have a back-to-back meeting on the 9 December.

6. Proposed meeting dates for upcoming ad-hoc groups are as follows:

9 December, 2015, Göteborg

21 January, 2016, tbd

24 February, 2016, tbd

Annex 1:

Participants:

Danish AgriFish Agency

Ms. Anja Gadgård Boye

Ms. Elsbeth Teichert

European Commission
DG Maritime Affairs and Fisheries

Ms. Marta Janakakisz

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Swedish Agency for Marine and Water Management

Mr. Pontus Nilsson

Ms. Lena Tingström

Ms. Malin Wilhelmsson

Ms. Märta Zetterberg

9.4 Minutes from ad-hoc meeting 9 December, 2015

2015-12-11

Minutes from the third ad-hoc group meeting, on the marine protected area Bratten

This was the third meeting in the established ad-hoc group and the meeting focused on the fourth draft proposal on Bratten. Prior to the ad-hoc group meeting, a fourth draft proposal on Bratten, together with a first draft of a Joint Recommendation, was forwarded to the concerned parties. Before the meeting, Germany confirmed that there are no objections against the Swedish proposals. This applies also to the procedural questions where Germany can go along with the start of the six months period. Germany could however not attend the meeting the 9 December 2015.

The meeting was held as a telephone meeting, the 9 December, 2015.

1. Welcome by The Swedish Agency for Marine and Water Management

The chair made an introduction and presentation of the agenda. Participants presented themselves (Annex I).
The chair explained that since the last meeting Sweden had the confirmation from Germany that they have no objections to the Swedish proposal and that they can go along with the start of the six months period. In this context, Denmark also confirmed that they accepted the start of the six months period from today's date.

2. General update on the proposal and process

The chair confirmed that the Swedish University of Agricultural Sciences, SLU Aqua, has updated the tables and maps with 2014 fishery data according to the Danish request. The legal basis has been clarified and put in an annex according to the Danish request.

3. Discussion

- Scrutiny of the proposal
  Denmark forwarded their comments before the meeting. Anyhow, due to time restraints they underlined that they haven´t had the time to coordinate with the Danish Nature Agency. During the meeting the Danish comments were examined and agreements were made on changes of the text.

  The *first draft* of the Joint Recommendation was also analyzed during the meeting. Denmark had some editorial comments, but also underlined that Denmark had guidelines and support from the Commission when working on their Joint Recommendation, and that it would be better that the Joint Recommendation on Bratten should follow the format of the Danish Joint Recommendation. It would therefore be more stringent to clearly outline the proposed measures and leave the background information in an annex, consisting of the proposal itself, in line with the recommendations from the Commission. Sweden took these comments onboard and confirmed that they will have a dialogue with the Commission on this point before forwarding a second draft of the Joint Recommendation.

- **AOB**

  Sweden asked about the Danish delegated regulation as Sweden needs to inform the fishery. Does Denmark have further information concerning the control issues? Denmark informed that they, according to the regulation, will use the available control measures consisting of VMS.

4. Conclusions and further meetings

Denmark had no new information on when their upcoming sites will be presented. Proposed meeting dates for "Bratten" are as follows:

21 January, 2016,

24 February, 2016

Annex 1. List of participants

Danish AgriFish Agency

Ms. Anja Gadgård Boye
Ms. Elsbeth Teichert
Ms. Pernille Birkenborg Jensen

Swedish Agency for Marine and Water Management

Mr. Pontus Nilsson
Ms. Lena Tingström
Ms. Malin Wilhelmsson
Ms. Märta Zetterberg

9.5 Minutes from ad-hoc meeting 21 January, 2016

2016-02-01

Minutes from the fourth ad-hoc group meeting, on the marine protected area Bratten

This was the fourth meeting in the established ad-hoc group. Prior to the ad-hoc group meeting, a revised version of the draft proposal on Bratten was forwarded to the concerned parties and the meeting was focused on the fifth draft proposal on Bratten.

The meeting took place at the Swedish Agency for Marine and Water Management (Havs- och vattenmyndigheten) in Göteborg, Thursday 21 January 2016, from 13.00 hrs to 16.30 hrs.

1. Welcome by the Swedish Agency for Marine and Water Management

The chair made an introduction and presentation of the agenda.

The chair underlined that since there now is an agreement on the six months' time limit to start from the 9 December 2015, and a second draft for a Joint Recommendation, the aim of this meeting is to reach a final draft.

2. General update on the proposal and process

The chair pointed out that since the last meeting there is now an updated proposal in a fifth draft version and a second draft of the Joint Recommendation.

- Comments have been received from DK and DG ENVI and they were also distributed to the participants. SE had a telephone meeting with DG ENVI where their comments were discussed. This discussion will be dealt with under AoB. The chair also reminded that there is a government assignment with a deadline on the 1 March of formulating a Joint Recommendation. In this context there are also news on the timing of the JR; the STECF plenary is planned for 11-15 April and DG MARE has informed that if they get the JR in the second half of March, they would have time to start the procedure and to allow for STECF some weeks to check the JR as well.

- The outstanding issue concerning the link between the CFP, the MSFD and OSPAR based on the Danish comments, was resolved by inserting the wording in the introduction: *Sweden has therefore decided to incorporate, where necessary, the recommendations to also protect the designated OSPAR habitats and species accepted under the OSPAR convention in the proposed measures in order to*

establish an ecologically representative network of marine protected areas in accordance with the Marine Strategy Framework Directive.

Germany did not provide any further comments or questions on the proposals.

3. Discussion

- During the scrutiny of the proposal based on comments received from Denmark, there were some editorial changes made and also the more principle issue concerning MSFD mentioned above. Most of the editorial comments had already been inserted in the final draft and agreed during the meeting. Two clarifications in the text concerning Danish fisheries, based on the data in the tables, were also made.
- The draft Joint Recommendation was updated based on comments received. The wording mentioned above, concerning the link between the CFP, the MSFD and OSPAR, was also included in the JR.

4. Conclusions and further meetings

- The ad hoc group concluded that there was an agreement on the two drafts (proposal text and JR). Since the group decided that there is no need for any more physical meetings, Sweden will also send the draft ad hoc meeting minutes and the final drafts of the proposal and JR to Germany.

- Denmark said that they will now, once updated versions have been forwarded, go into the formal process where they will first go to the minister, and then to the committee, where the stakeholders are present. The final approval is given by the Danish Parliament. Since this is the first process on drafting a JR where another Member State is initiating a process within Article 11 (CFP), it is difficult to foresee the exact timing, but Denmark estimated that it will take about a month.

- Sweden reiterated that there is a government assignment for formulating a JR, with a deadline on the 1 March, 2016.

5. AoB

- Update on the Danish proposals.
  - Probably the Danish proposal for fisheries management measures in seven Natura 2000 sites will be decided on by the 27 January, 2016 and the invitation for the pre-consultation meeting will follow shortly after.

- Comments from DG ENVI

- The group went through all comments made by DG ENVI. Many of the comments were more directed to a management plan rather than a proposal for fisheries conservation measures but some helpful editorial changes and additions to the text were made.

Annex 1. List of participants

Danish AgriFish Agency

Ms. Anja Gadgård Boye

Ms. Elsbeth Teichert

Swedish University of Agricultural Sciences, Department of Aquatic Resources - Institute of Marine Research

Mr. Andreas Wikström

Swedish Agency for Marine and Water Management

Mr. Pontus Nilsson

Ms. Lena Tingström

Ms. Malin Wilhelmsson

Ms. Märta Zetterberg

9.6 Minutes from stakeholder meeting 28 August, 2015

Minutes from dialogue meeting concerning conservation measures in the Natura 2000 site Bratten

Date: Friday 28 August, 2015, 10.00 - 12.00

Where: The Swedish Agency for Marine and Water Management, SwAM

Participants: Ellen Bruno (Swedish Society for Nature Conservation , SSNC), Peter Olsson (Swedish Fishermen Producer Organisation, SFPO), Mathias Ivarsson (SFPO, Shrimp Committee), Fredrik Lindberg (Swedish Fishermen Association, SFR), Markus Lundgren (Swedish Anglers Association), Inger Näslund (WWF), Fredrik Simonsson (Swedish Coast Guard), Joakim Hjelm (Swedish University of Agricultural Sciences, Department of Aquatic Resources SLU), Jonas Ericson, Martin Rydgren, Malin Wilhelmsson, Lena Tingström(SwAM)

At the meeting the following issues were addressed:

- Formal decision making when designation protected areas
- Two different processes when proposing fisheries conservation measures in marine protected areas
- Bratten
- Other MPAs in Sweden
- Initiatives from other Member States concerning fisheries conservation measures in MPAs

The purpose of the meeting was to ensure a successful dialogue between the agency, stakeholders and NGOs, that different views and questions concerning the proposed fisheries conservation were discussed and mediated both on the current issue on Bratten as well as the continuing dialogue concerning other MPAs in need of fisheries conservation measures.

The County Administrative Board of Västra Götaland has conducted a consultation concerning Bratten, in which representatives from professional fisheries and recreational fisheries were invited early in the process. This was done as a part of an Interreg project

which enabled an extended consultation with representatives from Danish and Norwegian professional fishermen.

Both representatives from professional fishermen and NGOs have provided comments on the proposal to the CAB on the formal consultation conducted by the CAB. However, it is important that the comments are documented in the process demanded by the Common Fisheries Policy, Article 11. The comments received from the NGOs and the fishermen will be a part of the documentation for the Joint Recommendation. There is however a possibility to make amendments prior to the pre-consultation meeting on the 10 September, 2015, but they must have been received by the 8 September, at the latest.

Issues and questions during the meeting:

WWF: It is important that all Member States with a direct management interest are invited to participate in the process in order not to delay it due to formalities.

SwAM have invited all Member States within the Scheveningen group and will also invite Norway as an observer in the work. SwAM will also ask the Member States to declare whether or not they are affected by the fisheries conservation measures

SFPO: Representatives from the fisheries consider that the dialogue in the former process, by the CAB, was conducted in a good manner.

SSNC: The NGOs have not had the same possibility to affect the proposal and are not satisfied with the process or the result.

WWF: The large western no-take zone, where no fishery is conducted today could be seen as a measure without any effect.

SFPO: According to information from the fishermen the area is, today not interesting to use because of the great depth, but the area could, in the future become more interesting and possible to use. It is therefore better to have protected the area pro-actively, before it could be exploited.

All agree that AIS is suitable to use for control and enforcement.

There are corridors established between the no-take zones in order to enable the passage by the fishing boats. Questions were asked if these corridors are sufficient.

SFPO: No-take area number four in the proposal is an area in which there have been discussions together with the CAB concerning different solutions. However, the fishermen and the CAB have accepted that it will be proposed to close the whole area, even though it is an important fishing ground since it is important with a sustainable fishery.

SSNC: The no-take zones are considered to be too small and fragmented. They are affected by resuspension originating from nearby areas.

Shrimp Committee: Many species are still present in the area despite continous fishery and resuspension.

SSNC: If there were more or larger areas that would not have been used for fishery, then the possibility would be that even more species or habitats would remain. The proposed conservation measures could be regarded as a paper tiger since only about five percent of the fisheries is affected.

SFR: Is the protection secondary? Is the purpose instead to stop fisheries?

SSNC: Not at all, the protection is primary – to stop ongoing activities is secondary. There are also problems concerning control and enforcement, it could be questioned if an effective control in this area is at all possible to conduct.

By introducing mandatory AIS, which is a real-time positioning system, it will be possible to control if a vessel is reaching a no-take zone. There are technical possibilities to introduce a system which sends an alarm to the control authorities when a vessel is approaching the no-take zones. However, this is a question of priorities of resources. In order to establish an effective control, one would most likely need to adopt a risk based control where you identify

certain patterns and extend the control where there is a greater risk for infringements. Technical control and enforcement using data from AIS, VMS and verification with the logbook should be enough to hold in court.

WWF would like to see larger no-take zones for several reasons; to protect more of the habitats, to facilitate control, because both NGOs and the fisheries want the same thing, enhanced productivity, in areas with a high biodiversity. The NGOs were not invited early in the regional process and that is not good. All fisheries should be banned in the no-take zones, also the recreational fisheries. No-take zones are good for the productivity. There are big problems concerning control and enforcement of fisheries.

SFPO: The Coast Guard has now improved the control in fisheries. Earlier, Danish fisheries have been negative to the use of AIS as a control tool.

Shrimp Committee: One trawl track in a productive area could equal two trawl tracks in an area with lower productivity. By following boats, in real-time, for example via the Marine traffic website, there will be a possibility of control among fishermen as well as by the public, which might lead to an increased motivation to abide by the rules.

WWF: It is important that all nationalities are controlled, not only Swedish fishermen.

SSNC: Will the halibut protection be included in the proposal for conservation measures in Bratten? It would be strange if Sweden considers halibut important for conservation and Bratten is designated for, among other things, to protect large fish as halibut, if you allow other Member States to fish there.

SwAM will not include the issue concerning the halibut in the process for Bratten. This is a separate issue that will be discussed in a separate process.

SSNC: SSNC will be glad to join in the upcoming ad-hoc group meetings

SwAM pointed out that there is a possibility to invite experts to these meetings, but in the former Danish process these experts were mainly scientists, control experts and legal advisors working at the Agri/Fish agency or DTU Aqua. The proposal is also sent to the AC and this proposal will probably land with the Kattegatt-Skagerrak group. The process is describet in the ToR for the Scheveningen Fish/Envigroup.

Concerning other Member States´ processes on conservation measures all agree that it is useful to get information on these processes. This could be done by an e-mail notification to this group.

SSNC: Is there any progress concerning the issue on permits for fisheries in Natura 2000 sites?

SwAM is working with the update of the guidelines on fisheries conservation measures in MPAs.

SwAM informed that fisheries conservation measures are planned for in additional areas in a near future, therefore the proposal to initiate a forum that will meet on a regular basis for discussing these issues among representatives from the fisheries and the NGOs. All agreed that this would be positive.

Appendix 10. County Administrative Board formal consultation with national fisheries and NGOs (only available in Swedish)

10.1 Oceana

Angående remiss om fiskeregleringar i Natura2000-området Bratten
Oceana välkommnar förslaget om fiskeregleringar i Natura2000-området Bratten, men tycker samtidigt att förslaget har vissa brister. Tyvärr säkerställer det inte skydd av de känsliga arter, miljöer och höga naturvärden som dokumenterats i området, däribland djupa hårdbottnar, korallträdgårdar, svampdjursamhällen, pockmarks, sjöpennebottnar, broskfiskar och djuphavsfiskar med långsam tillväxt. Oceana anser att det är viktigt att området får fullgott skydd i enlighet med marina direktivet och habitatdirektivet, främst från bottentrålning, men även andra störande aktiviteter som sportfiske och ankring. Särskilt med tanke på att flertalet av arterna har sin enda svenska förekomst i området. Tyvärr fokuserar det föreslagna skyddet främst på områden som redan är fria från påverkan av bottentrålning. Oceana menar att det är sannolikt att flertalet av de skyddsvärda arter som dokumenterats i området tidigare kan ha haft större utbredning och förekommit i områden som i nuläget trålas.

Då de höga naturvärden som dokumenterats i området främst är knutna till botten anser Oceana att bottentrålning bör vara förbjudet inom hela Natura2000-området, då denna fiskemetod har förödande effekter på bottenlevande organismer. Genom att låta ett trålförbud omfatta hela Natura2000-området kan man säkerställa att skyddet tillgodoser ett stort sammanhängande område, som täcker alla kända nyckellokaler för hotade och känsliga arter samt ansamlingar av bubbelhål. Ett större skyddat område skulle dessutom gynna återhämtningen efter den långvariga störning av bottenfauna som trålningen orsakat. Vidare skulle ett totalförbud mot bottentrålning vara betydligt enklare att effektivt kontrollera i enlighet med EU-kommissionens riktlinjer för fiskeåtgärder i Natura 2000-områden. Förutom dess negativa påverkan på botten orsakar även bottentrålning bifångst av hotade arter som hajar och rockor.

Oceana anser även att sportfiske ska förbjudas i området eftersom verksamheten är riktad mot skyddsvärda fiskar och på grund av dess dokumenterade negativa påverkan på fastsittande koraller. Vi tackar för möjligheten att framföra dessa åsikter i frågan och ser fram emot fortsatt dialog.

Vänligen,

Hanna Paulomäki, Chef för Oceanas kontor i Köpenhamn

Kontaktpersoner:
Christina Abel, marinbiolog, cabel@oceana.org
Magnus Eckeskog, rådgivare, meckeskog@oceana.org

10.2 Naturskyddsföreningen

Naturskyddsföreningens remissvar på Västa Götalands länsstyrelses remiss om fiskeregleringar i Natura2000-området Bratten

Sammanfattning av Naturskyddsföreningens synpunkter

Naturskyddsföreningen välkomnar förslaget och initiativet taget av Västra Götalands länsstyrelse att begränsa fisket i Bratten-området, men föreningen anser att förslaget på flera punkter behöver skärpas för att få avsedd effekt.

Föreningen är mycket kritisk till att miljöorganisationerna uteslutits från processen som lett fram till förslaget. Uteslutningen har inte gynnat någon part och utgör sällsynt dålig myndighetsutövning. Bratten är ett unikt marint område med väldigt höga naturvärden knutna till botten. Med kunskap om de förödande effekter bottentrålning har på bottenlevande djur, anser Naturskyddsföreningen att det inte bör vara tillåtet att bottentråla någonstans i området. Området bör tillåtas återhämta sig från den långvariga störning som bottentrålning orsakat, och bör få utvecklas till den tillflykt och refug för marina arter som Skagerack så väl behöver.

Kan länsstyrelsen inte acceptera en sådan helt rimlig begränsning mot en destruktiv fiskemetod i ett marint Natura2000-område som ett förbud innebär, så bör skyddet mot bottentrålning åtminstone omfatta ett eller två stora och sammanhängande områden som täcker alla kända nyckellokaler för hotade arter samt ansamlingar av bubbelhål, utan korridorer och med en rejäl buffertzon. Det föreslagna skyddet som det ser ut idag är fragmenterat, svårt att efterleva och, med föreslagna kontrollåtgärder, omöjligt att effektivt kontrollera. Föreningen anser också att sportfiske inte ska få bedrivas i föreslagna områden stängda för yrkesfisket då sportfisket specifikt riktar in sig på de mest skyddsvärda fiskarna i området, skadar fastsittande koraller och enbart representerar små socio-ekonomiska värden.

Naturskyddsföreningen välkomnar flertalet av de extra skyddsåtgärder som länsstyrelsen föreslår men anser samtidigt att många av dem inte skulle behövas om det konkreta skyddet mot fiske var bättre.

Bakgrund Bratten

Bratten är ett unikt ravinområde ca 20 nautiska mil SV om Väderöarna som avsattes som ett marint Natura 2000-område 2012. Ravinerna i området är smala (100-300 meter) och upp till 100 meter höga med branta sidor. Bottnarna i ravinerna består till största delen av mjuk lera men sidorna på ravinerna och trösklarna består av hårdbottnar. I området finns också hundratals stora gropar (vissa 100 m i diameter) formade av gasbubblor och havsströmmar, så kallade pockmarks. Många av dessa har hårdbottenstrukturer.

Området hyser ett mycket rikt djurliv trots det stora djupet (120-530 meter). Många av arterna i området har numera sin enda svenska förekomst här, t.ex. risgrynskorallen och sjöpennan *Virgularia tuberculata*, samt hornkorallerna *Paramuricea placomus* och *Anthothela grandiflora*. På de mjuka bottnarna i sprickdalarna i området där bottentrålning inte har kunnat ske, hittar man en rik fauna som enligt länsstyrelsen ”troligen funnits i hela området” innan bottentrålningen påbörjades. Här finns stora bestånd av sjöpennor (8 arter), som t.ex. den större piprensaren *Funiculina quadrangularis* som kan bli 1,7 m hög. I det nordvästra hörnet av Natura 2000-området, på gränsen till den norska ekonomiska zonen, har flera mycket ovanliga arter hittats, t.ex. långhalsen *Ornatoscalpellum stroemi* (en släkting till havstulpanen) och det skaftade svampdjuret *Stylocordyla borealis* (den enda fyndplatsen i Sverige). Här finns också det största djupet i svenska vatten. Sammanlagt har forskare hittat inte mindre än 32 rödlistade marina arter i området.

Bratten-området är också känt för sina stora exemplar av många ovanliga och hotade djuphavsfiskar t.ex. lubb, långa, hälleflundra, hajar och rockar samt havsmus. Dessa djuphavsfiskar är särskilt känsliga för överfiske eftersom de har långsam tillväxt, sen könsmognad och låg

reproduktionsförmåga. Bland broskfiskarna finns brugd, håbrand, slätrocka, fläckrocka, knaggrocka och pigghaj på OSPAR´s lista över hotade och/eller minskande arter.
Följande naturvärden har identifierats som skyddsvärda i Bratten:

- Djupa hårdbottnar (Natura 2000-habitatet *1170 Rev*)
- Korallträdgårdar (OSPAR-habitatet *Coral gardens*)
- Svampdjurssamhällen (OSPAR-habitatet *Deep sea sponge aggregations*)
- Pockmarks (Natura 2000-habitatet *1180 Bubbelstrukturer*)
- Sjöpennebottnar (OSPAR-habitatet *Sea pens and burrowing megafauna*)
- Broskfiskar som hajar och rockor (flera är OSPAR-arter)
- Större fiskar knutna till rev och pockmarks

Generella kommentarer om framtagandet av förslaget
Naturskyddsföreningen välkomnar förslaget och initiativet taget av Västra Götalands länsstyrelse. Att begränsa aktiviteter som äventyrar de värden som ett marint område avsatts för att skydda, kan tyckas självklart. Men faktum är att många andra länsstyrelser med marina skyddade områden inte gjort något för att i praktiken skydda områdena genom restriktioner. Detta är på nationell nivå djupt olyckligt då ett nätverk av skyddade områden med relevanta fiskerestriktioner är en av de viktigaste åtgärderna för att nå det marina direktivets krav på god ekologisk status samt nationella och internationella miljömål.
I remissen uttrycker länsstyrelsen stolthet över den omfattande dialog med företrädare för yrkesfiske, sportfiske, myndigheter och forskningsinstitutioner i Sverige, Norge och Danmark som föregått förslaget. Att ideella organisationerna inte bjöds in till dialogmöten förklaras med att ”det skulle hämma en öppen och konstruktiv dialog”. Naturskyddsföreningen är starkt kritisk till att miljöorganisationer på detta sätt inte fått ta del av samråd och dialog och anser att det vittnar om sällsynt dåligt myndighetsutövande. Föreningen vill tydligt markera att denna processtyrning inte är acceptabel och inte har varit bra för någon part utan istället lett till just det som skulle undvikas: hämmandet av en öppen och konstruktiv dialog. Vi emotser en förklaring från länsstyrelsen i denna fråga.

Fiskefria områden för yrkesfisket
Bottentrålar, dvs de redskap som används för att fiska räkor på Bratten, är den fiskemetod som påverkar bottenmiljöer allra mest. Alla fastsittande eller sedimentlevande djur påverkas kraftigt negativt av mekaniska skador då de rycks upp ur sedimentet, rycks loss från sina fästen eller bryts av. Särskilt känsliga är organismer som är långlivade och själva bygger upp sin livsmiljö, t.ex. koraller och svampdjurssamhällen. Även sjöpennor är mycket känsliga för bottenpåverkande redskap och deras utbredning i området har med största sannolikhet varit betydligt större än i dagsläget. Frånvaron av sjöpennor i trålade områden beror på att trålarna bryter av den centrala skelettstaven i kolonin som då inte längre kan hålla sig upprätt över bottnen, utan i stället hamnar liggande i bottensedimentet där polyperna kvävs eller svälter ihjäl.
När trålbord och fångstkassar dras över bottnen rör de också om i bottensedimentet på ett djup av minst 20 cm och stora mängder sedimentpartiklar åker tillbaka upp i vattenkolumnen. I studier som har gjorts efter en räktråll i Norge, var sediment-plymen 120-150 meter bred och 15-18 meter hög 30-60 minuter efter det att trålen hade passerat. Sediment kan transporteras med bottenströmmar till områden på stora avstånd från trålområdet. Hornkoraller och sjöpennor anses som mycket känsliga för sedimentering då deras polyper lätt kan täppas igen av höga mängder sedimentpartiklar som virvlar runt i bottenvattnet.
På undervattenfilmer från Bratten ser man flera hela eller delar av trålar som har fastnat i kanten på ravinen. Ibland sitter fiskeredskap insnärjda i koraller och fortsätter ibland att fånga fisk (”spöknät”). I trålfisket efter fisk och räka får man också bifångster av flera hotade fiskarter, som t.ex. arter av hajar och rockor.
Trots de helt unika och biologiskt och geologiskt värdefulla havsmiljöerna i Brattenområdet, och trots kunskapen om de skador bottentrålar orsakat och fortfarande orsakar i området, har länsstyrelsen valt att enbart reglera bottentrålning i de områden som ändå inte bottentrålas och i små områden runt de kända förekomsterna av rödlistade arter. Skyddet motsvarar 27% av hela Brattenområdet men bara 5,6 procent av den yta som bottentrålas idag. Man har med andra ord valt att främst skydda de områden

som ändå inte fiskas. Det kan förefalla rationellt men riskerar istället att missa målet. I dagens effektiva fiske kan man räkna med att om fiske inte bedrivs i ett område tyder det antingen på att

1. området inte hyser mycket fisk och sannolikt har låg biologisk mångfald och biologisk produktion samt är mindre värt ur ett naturvårdsperspektiv, eller
2. på att fiskare är rädda för att förlora redskap i området på grund av bottnens konstruktion. Så är det t.ex. nere i ravinerna på Bratten.

Att skydda dessa områden är inte meningslöst då det säkerställer fortsatt bottentrålfritt även om redskapen skulle utvecklas och fisket förändras. Men förhållningssättet missar de områden som verkligen behöver skydd, dvs de som riskerar att ytterligare skadas av fiske och de som redan skadats och som skulle kunna återhämta sig. Länsstyrelsen verkar istället resonera som att ”trålade områden är förlorade områden.” Med andra ord helt tvärtemot Naturskyddsföreningen uppfattning att stora delar av Bratten kan återfå höga biologiska värden och fungera som refug för många marina arter, precis som som skyddade områden är avsedda att göra, om bottentrålningen i området upphör.

På kartorna som följer med remissen kan man tydligt se att trålningen är mest intensiv i närheten av ravinerna. Som tidigare nämnts sammanfaller alltså dessa fiskeområden med de områden som har de högsta biologiska värdena. Ändå väljer man att fortsatt tillåta bottentrålning runt ravinerna med en buffertzon på enbart 250 m. Man väljer också att splittra upp området i många små områden för att underlätta för yrkesfiskare att röra sig runt och mellan områdena. Naturskyddsföreningen anser att detta föreslagna skydd mot bottentrålning är högst otillfredsställande. Dels därför att skyddet i sig är otillräckligt, inte minst i beaktande av sedimenteringen, dels därför att reglerna kommer att bli svåra att efterleva och i princip omöjliga att kontrollera.

Föreningen har redan tidigare framhållit att vi, i prioritetsordning, hellre skulle vilja se:

1. Ett totalt förbud mot bottentrålning i hela Natura 2000-området. Detta motiveras med de höga och unika biologiska värdena som är knutna till området och den potential området har för att fungera som ett större skyddat område i den ekonomiska zonen, med hög biologisk mångfald och stora mängder fisk och skaldjur som skulle kunna fiskas på ett uthålligt sätt (utan destruktiva redskap i vissa delar av området) och spridas till närliggande områden. Vikten av ett sådant skyddat område är särskilt akut med anledning av bristen på andra skyddade områden i närheten.
2. Ett eller möjligen två stora områden som helt täcker samtliga områden med bekräftat höga naturvärden och pocketmark-områdena med rejäla buffertzoner (minst 500 m för att så långt möjligt undvika sedimentation på skyddade ringskador) helt skyddade för bottentrålning och sportfiske. Detta skulle ge ett betydligt bättre skydd både för trålning och sedimentering och också vara lättare för fiskare att efterleva och för myndigheter att kontrollera. Att på detta viset binda ihop områden med känt höga naturvärden (och ofta liten trålningsverksamhet då de sannolikt undvikits pga risk för skador) med varandra ger också ett bra (och hittills mycket saknat) utvärderingsunderlag för skillnader mellan trålade och otrålade områden och återhämtning av f.d. trålade områden.

I EU-kommissionens riktlinjer för hur fiskeåtgärder i N2000-områden ska utformas betonas att fragmenterade åtgärder ska undvikas och att fiskerestriktioner ska vara kontrollerbara: ”*Fisheries management measures proposed in Natura 2000 areas must be controllable in a cost-effective way. Areas in offshore waters are more difficult to monitor. Small and scattered areas should be avoided. Areas should be big enough and should include a buffer zone to prevent vessels entering the area unnoticed. The area to be protected plus the buffer zone constitute the "controlled waters".*

Naturskyddsföreningen anser att liggande förslag inte är in enlighet med dessa riktlinjer och kommer om så behövs påpeka detta för EU-kommissionen.

Naturskyddsföreningen anser för övrigt att fiske i N2000-områden och andra marint skyddade områden alltid ska betraktas som en verksamhet som behöver tillstånd för att bedrivas (precis som

man idag behandlar vindkraftverk, bebyggelse etc) i enlighet med miljöbalken 7 kap 28 a §. Detta förhållningssätt har också stöd i ett uppmärksammat rättsfall på EU-området[1] (musselskrapfiske i Wadden sea, Holland). Med en sådan tolkning följer att alla fiskare som avser att fiska i Brattenområdet, oavsett om förvaltningsplanen inte specifikt utesluter deras fiske, ska göra en miljökonsekvensbeskrivning över sin planerade verksamhet och söka tillstånd från länsstyrelsen. Om tillstånd ges ska den som utför verksamheten också följa upp hur verksamheten påverkar naturvärdena i området.

Stängda områden för sportfisket
Naturskyddsföreningen är förvånad och besviken över att sportfisket, som specifikt riktar in sig på de mest skyddsvärda fiskarna i området, nämligen stora exemplar av hajar, rockor, lubb, hälleflundra och andra djuphavsfiskar, fortsatt tillåts i stora delar av området. Det är inte acceptabelt, särskilt när både sportfiskare och länsstyrelsen betonar att sportfisket på Bratten är en exklusiv aktivitet för ett fåtal båtar och fiskare som kan ta sig så långt ut de fåtal dagar då utflykter är möjliga på grund av vågor. Detta fiske har därför varken ett särskilt högt socialt eller ekonomiskt värde. Vidare skriver länsstyrelsen i remissen att ”I ROV-filmerna ser man ofta avslitna fisklinor runt hornkoraller, vilket i flera fall resulterat i döda eller döende kolonier av hornkoraller insnärjda i linorna.” I dialogen har också sportfiskare själva berättat ”att lubben minskar om man har varit på samma ställe många gånger och att man hela tiden försöker hitta nya fångstplatser för att undvika detta.” Dessutom konstateras att trots att sportfisket ofta tillämpar återutsättning av rockor och hajar, vilket är möjligt då de saknar simblåsa, så kan dessa fiskar ändå drabbas av ”tryckfallssjuka” när de dras upp från så stora djup. På Havets hus i Lysekil har man noterat både blodkärlsbristningar på buken och blåsor i ögonen på hajar och rockor som har samlats in till dem.

Naturskyddsföreningen anser att sportfiske ska förbjudas i alla de områden där yrkesfisket är förbjudet. Att ett fåtal personer för nöjes skull ska tillåtas förstöra och döda sällsynta och skyddsvärda fiskar och koraller kan inte accepteras.

Övriga åtgärder

- Utökad kontroll med hjälp av AIS för både sport- och yrkesfiskare

  Naturskyddsföreningen anser att det är helt nödvändigt att kontrollen av fiskebåtar förbättras för att säkerställa ett bra skydd för området, inte minst med liggande förslag. Mest smidigt förefaller att vara att kräva tätare VMS- rapportering från de båtar som fiskar i området. VMS är ett system utformat för fiskekontroll där varje land redan har ett utvecklat mottagningssystem för att övervaka positioneringar i realtid. Men det föreslagna positionsverktyget, AIS, är däremot är ett säkerhetssystem för stora båtar. Rapporteringen sker alltså inte till fiskemyndigheter utan till säkerhetsmyndigheter. För att AIS ska kunna fungera som kontrollverktyg måste det säkerställas att fiskemyndigheter har tillgång till information i realtid. Problemet med att positioneringen inte ger information om huruvida båten trålar eller inte är dessutom detsamma för AIS som för VMS. Naturskyddsföreningen hade hellre sett krav på tätare VMS-rapportering samt, som sagt var, större skyddsområden med rejäla buffertzoner och utan korridorer vilket skulle underlätta kontroll.

- Tidsbegränsat fiske efter räka (mån-tors) i områden utanför de fiskefria zonerna.

  Föreningen anser att allt fiske i området ska tillståndsprövas i enlighet med Miljöbalken 7kap 28a§. För övrigt kan förslaget om generella begränsningar tillstyrkas även om föreningen bedömer att åtgärden inte kommer att nämnvärt bidra till skyddet för området eftersom det första tråldraget är det som skadar mest. Snarare ser föreningen åtgärden som ett sätt att öka lönsamheten i fisket. Föreningen anser att den höga överkapaciteten i det svenska räkfisket bör adresseras genom att minska flottan.

- Återutsättning av broskfiskar för både yrkes och sportfiskare

Tillstyrkes men med reservation för att detta inte är ett fullgott skydd för dessa fiskar då broskfiskar är känsliga för klämskador eftersom de saknar revben som skyddar de inre organen och det är oklart om de kan överleva om man sätter tillbaka dem efter att ha fått dem i trålen eller om man är ovarsam som sportfiskare. De kan också drabbas av ”tryckfallssjuka” när de dras upp från stora djup.

- Skydd av hälleflundra under lekperioden även för danska båtar.

Tillstyrkes. Detta skydd borde, precis som det redan gör för alla svenska och norska fiskare, också gälla för alla danska fiskare, inte bara i Brattenområdet.

- Ankringsförbud för sportfiskare
- Framtagandet av ett digitalt fiskerisjökort
- Fångstregistrering för sportfiskare i området (art, längd, vikt, fångstposition, ev. återutsättning).
- Rapportering av förlorad utrustning.
- Förvaltningsgrupp för sportfisket.
- Inrapportering av fångade arter utöver fiskar för yrkesfiskare
- Utveckling av skonsammare redskap
- Uppföljning av botten med dropkamera/ROV vart 6:e år, fångststatistik och fiskeansträngning vart 3:e år.

Samtliga tillstyrkes. Dock skulle föreningen gärna se en ekonomisk kalkyl över kostnaderna för de extra åtgärder som föreslås och jämföra dem med kostnaderna för att stänga räkfisket i ett större område.

Stockholm den 30 oktober 2013
Naturskyddsföreningen

Mikael Karlsson
ordförande

Ellen Bruno
Sakkunnig marina ekosystem och fiske

10.3 WWF

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Maria Kilnäs

Ulriksdals Slott, Solna den 31 oktober 2013

Världsnaturfonden WWFs yttrande gällande – "Förslag till fiskeregleringar för Natura 2000-området Bratten i svensk ekonomisk zon i Skagerrak" – Dnr 511-26027-2012

Världsnaturfonden WWF har tagit del avrapporten "Förslag till fiskeregleringar i Bratten – Rapport från projekt Hav möter Land" och lämnar här sina synpunkter. Förslaget ger en förhoppning om att Länsstyrelser och andra ansvariga myndigheter nu aktivt tar tag i arbetet med att genomföra åtgärdsförslag för skyddade områden och inrättar fiskeregleringar där det behövs för att ge relevant skydd. Det är ett steg framåt för att uppnå de svenska åtaganden som gjorts gentemot EU och de nationella miljömålen. Rapporten beskriver väl de höga naturvärden som finns i Natura 2000 området Bratten och hur mänsklig påverkan genom bottentrålning starkt modifierat stora delar av området. I förslaget på förvaltningsåtgärder för Bratten ingår att inrätta fiskefria områden vilket WWF anser vara nödvändigt för att uppnå ett reellt skydd för de känsliga och redan starkt påverkade artgrupperna i området och deras livsmiljöer.

Sammanfattande synpunkter

- WWF välkomnar att ett **förslag på förvaltningsplan för Natura 2000-området Bratten** nu läggs fram.
- WWF anser att beskrivningen av området i rapporten i stora delar är bra, men att avsaknaden av mer heltäckande inventeringar visar på behovet av förstärkta resurser till inventering och förvaltning av marina skyddade områden mer generellt. Mer heltäckande inventeringar förstärker naturligvis underlag för beslut om förvaltande åtgärder.
- WWF anser att bottentrålning inte bör förekomma i Natura 2000-områden då det är de olika naturtyperna i bottenmiljöerna som området är till för att skydda. De **fiskefria zoner** som anges i förslaget är otillräckliga då de är små och ej sammanhängande samt tillåter visst sportfiske. För att ha avsedd effekt behöver förslaget åtminstone förstärkas så att områdena/zonerna knyts ihop och att samma regler gäller för allt fiske.
- WWF anser att VMS inte kan ersättas av AIS eftersom den senare metoden har både tekniska och organisatoriska nackdelar. Att komplettera VMS med AIS skulle dock kunna vara positivt, då det ger möjlighet till tätare signaltid och därmed **viss utökad kontroll**.
- WWF stöder förslaget **om ankringsförbud** i alla fiskefria områden.
- Broskfiskar bör överhuvudtaget inte hamna i fångsten. Det är särskilt viktigt vid trålfiske, då fisken riskerar att klämmas så att de dör vid återutsättning. Sportfisket har en betydande påverkan på dessa fiskar och ytterligare åtgärder för att begränsa sportfiske på dessa arter i området bör övervägas.

- WWF stöder skydd av hälleflundra under lekperioden. Skydd under lekperioden bör gälla alla fiskarter i området. WWF vill också se ett generellt skydd för hälleflundra, broskfiskar och andra stora rovfiskar i området till dess att bestånden är stabila.
- Ett mer detaljerat sjökort för området behövs men WWF anser att termen **fiskerisjökort** är missledande och att det istället bör kallas **Natura 2000 sjökort – Bratten.**
- WWF stöder förslaget om utökat rapporteringsystem för fångstregistrering även för sportfisket.
- WWF är positivt till ökat samarbete kring utbildning och kunskapsöverföring men saknar en tydlig ansvarsfördelning i förslaget.
- Utveckling av skonsammare redskap är nödvändigt om fiske ska bedrivas inom ett skyddat område. Arbetet behöver skyndas på, liksom tillämpningen av kamera ombord för att kunna verifiera fångst och bifångst.
- Uppföljning och utvärdering är en väsentlig del av förvaltningen av skyddade områden så att åtgärder kan anpassas efter resultat. WWF anser att tidsintervallen för uppföljande undersökningar och datainsamling i förslaget är för långa för att vara funktionella.

Synpunkter på förslag till reglering av fisket

Fiske är en verksamhet med tydligt uttag ur ekosystemet och beroende av fiskemetod påverkas ekosystemets struktur och funktion mer eller mindre allvarligt. Det är känt att det bästa fångstresultaten i vissa fisken (tex. räkfisket vid Bratten) tyvärr sker i mycket känsliga områden med hög biologisk mångfald och innebär en tydlig negativ och oftast förödande påverkan. WWF anser att det är av största vikt att sätta tydliga begränsningar för fiskeaktiviteter, oavsett om det är yrkesfiske, turistfiske eller fritidsfiske, i känsliga områden med behov av skydd. I uppföljningen bör man även uppmärksamma och långsiktigt utvärdera effekterna för fisk utanför de fiskefria områdena efter att de inrättats.

Fiske i alla marina skyddade områden bör bedrivas i linje med gällande miljölagstiftning och genomgå tillståndsprövning med kompletterande regleringar ur fiskelagstiftningen. Utan tillståndsprövning med fungerande tillsyn och kontroll bör inget fiske, vare sig det är kommersiellt eller fritidsrelaterat, få bedrivas i dessa skyddsvärda områden. WWF vill lyfta upp god ekologisk status och dess implikationer för fiske. Om ett fiske i ett visst område inte är förenligt med någon av deskriptorerna för GES borde det i enlighet med EUs egna riktlinjer kunna förbjudas. Detta betyder att man, i ett Natura 2000 område, inte får fiska på en art som anses hotad, eller som är en viktig del i ett hotat ekosystem.

WWF konstaterar att beslutet om ny grundförordning för EUs gemensamma fiskeripolitik har ändrat förvaltningsförutsättningarna även inom marina skyddade områden. I EU-kommissionens riktlinjer för hur fiskeåtgärder i Natura 2000-områden ska utformas betonas att fragmenterade åtgärder ska undvikas och att fiskerestriktioner ska vara kontrollerbara. Detta bör påverka utformningen av fiskereglering även i Bratten.

WWF anser att det finns mycket starka motiv till att fisket ska regleras i Bratten, ett av få kvarvarande biologiskt värdefulla utsjöområdena i svenska västkustvatten. Här finns fisk och arter som man i princip inte längre hittar någon annanstans. Skyddsåtgärderna av Natura 2000 området Bratten måste utgå från avsikten att bevara den biologska mångfalden för fortsatt väl fungerande ekosystem. Förvaltningsåtgärderna bör omfatta hela Natura 2000 området och beakta ekosystemfunktionerna med dess struktur och de karaktäristiska växter och djur som hör till de specifika habitaten. Bottentrålar, dvs de redskap som används för att fiska räkor på Bratten, är den fiskemetod som påverkar bottenmiljöer allra mest. WWF anser därför att bottentrålning inte bör ske inom Natura 2000-området.

WWF kommenterar nedan i punktform olika förslag till åtgärder för starkare skydd.

Fiskefria zoner – Det är naturligtvis av största vikt att inrätta fiskefria zoner för alla typer av fisken i de områden som utpekats i samband med framtagandet av rapporten. WWF anser att hela Natura 2000-området bör stängas för bottentrålning då detta har den största negativa påverkan på bottenhabitaten. WWF anser också att det av flera skäl är viktigt att sammanbinda de fiskefria områden som bland annat löper i linje med själva ravinsträckningen. Dels ur ett återhämtningsperspektiv där man bör kunna utläsa förändringseffekterna av att ett starkt fiskat område stängs, dels då det underlättar kontroll och efterlevnad. Detta skulle innebära att de utpekade mest skyddsvärda områdena 7a-7b-7c-7d-7d-4-5-12 tydligt binds samman för att åstadkomma en verklig effekt. I det området bör totalt fiskeförbud gälla. Område 1-2-3 bör också länkas samman med varandra liksom område 6-10-11. Även för dessa bör fiskeförbud gälla för samtliga typer av fisken. Större sammanhängande områden ger bättre kontrollmöjligheter och mindre risk för misstag i båtarnas rörelsemönster så efterlevnaden blir enklare. Det största sammanhängande området som föreslås som fiskefritt i Bratten fiskas inte aktivt idag så här bör en relevant förklaring läggas till varför man väljer det som en stor sammanhängande fiskefri zon för mjukbotten.

På kartorna som följer med remissen kan man tydligt se att trålningen är mest intensiv i närheten av ravinerna. Dessa fiskeområden sammanfaller ofta med de områden som har de högsta biologiska värdena. Ändå väljer man att fortsatt tillåta bottentrålning runt ravinerna med en buffertzon på enbart 250 m. Att splittra upp skyddet i många små områden med passager för yrkesfiskare gör att föreslagna skydd mot bottentrålning är helt otillfredsställande.

WWF vill se ett förbud mot bottentrålning i hela Natura 2000 området. Detta motiveras med de höga och unika biologiska värdena knutna till Bratten och den potential området har för att fungera som en biologisk frizon för fisk och andra arter i svensk ekonomisk zon. Inom Bratten-området skulle man sedan kunna tillåta andra typer av fiskeredskap i vissa zoner om det sker med mer skonsamma metoder och på ett uthålligt sätt. Ett sådant skydd i Natura 2000 området Bratten är av särskild vikt med anledning av att det saknas sådant skydd i svensk zon i övrigt.

Utökad kontroll – Förslaget i rapporten med obligatorisk AIS sändare inom Bratten området har fördelar och nackdelar. Det är naturligtvis bra med täta positionssignaler (var 30 sek) som AIS ger för att få en mer utförlig bild av fartygens och båtarnas rörelsemönster. Men AIS kan manipuleras enklare än VMS. WWF välkomnar därför AIS som ett komplement till VMS, men inte som ersättare av VMS. I dagsläget är den ordinarie signaltiden för VMS 60 minuter för norska, svenska och danska fartyg men man kan kräva att ha tätare signaltider specifikt inom Bratten-området. AIS är ett säkerhets- och identifikationssystem för sjöfart med en räckvidd på omkring 25-65km beroende på fartygets masthöjd och hurivida det finns landsstationer eller sateliter tillgängligt. AIS kan naturligtvis användas på många olika typer och storlekar av båtar men är bara obligatoriska för större fartyg över 300 bruttoton enligt IMO – Internationella Maritima Organisationen. Nu går VMS-data direkt till HaV, som är ansvarig myndighet för fiskeregleringen, medan all information från AIS tas emot av Sjöfartsverket. Om man ska använda AIS som obligatorisk sändare för alla båtar som vistas i Bratten måste man även se till att Sjöfartsverkets signalmottagning direkt överförs till HaV för rimlig möjlighet till kontroll i realtid.

Varken AIS eller VMS beskriver direkt om trålaktivitet är pågående eller ej. Systemen visar förflyttning och kan i viss mån beskriva fiskeaktivitet efter jämförelser med hastighet och riktning mellan två punkter. Så problemet trålningsverifikation är detsamma för båda systemen, dvs inte enbart ett problem för VMS som framhålls i förslaget. AIS är dessutom designat för information, inte kontroll, och därmed lätt att manipulera. Man kan till exempel ganska enkelt kalibrera om så att den konstant visar en felaktig position. För att få en bättre bild av trålaktiviteter föreslår WWF att kamera och sändare på trålbord utvecklas så att delar av trålfisket kan verifieras och forskare få en utökad bild av trålbotten och påverkan på densamma.

Minskad fångstansträngning – WWF vill förbjuda bottentrålning i hela området. Att i övrigt begränsa antalet fiskedagar till fyra fasta dagar i veckan i hela Natura 2000 området är en åtgärd i rätt riktning. De mest effektiva resultaten för biologisk mångfald i ekosystemet skulle naturligtvis vara att helt stänga området för fiske. Då skulle både bottenhabitaten, stora fiskarter och räkbestånden få en frizon där tillväxt gynnas.

Ankringsförbud – WWF bifaller ankringsförbud inom alla fiskefria områden. Ankare på botten med känslig fauna eller flora bör alltid undvikas då de kan göra mer skada än uppsåtligt är om det hamnar på ”fel” plats. Om inget fiske får ske inom området så ska heller inte ankring ske annat än i nödsituation.

Synpunkter på förslag till övriga förvaltningsåtgärder

Utsättning av broskfiskar - Att broskfiskar idag skall återutsättas vid fångst och hanteras i särskild ordning kan i sig verka positivt men i grunden bör dessa arter inte hamna i fångsten. Om så sker bör det vara en tydlig differentiering i hantering mellan yrkesfiske och sportfiske. Chanserna att överleva efter trålfångst är betydligt sämre än efter fångst på lina då klämskador på fisk lätt uppstår vid trålfångst. Trålfiske bör därför alltid ske med så selektiva redskap att broskfiskar ej fångas.

Även sportfiskarnas redskap har negativ effekt på bottenhabitat och fångar specifikt stora ekologiskt värdefulla och ofta hotade rovfiskar såsom till exempel lubb, hälleflundra, hajar och rockor. Pigghaj är idag förbjudet att fiskas inom svensk zon, även av sportfiskare. Sportfisket på Bratten är en exklusiv aktivitet för ett fåtal båtar och fiskare som kan ta sig så långt ut de dagar då lämplig väderlek tillåter. Det sociala och ekonomiska värdet av denna typ av fiske bör utvärderas för att se om det krävs speciella regleringar eller om områdena helt kan stängas för fritidsaktivitet. Sportfisket är om möjligt ännu svårare att övervaka och kontrollera än yrkesfisket så därför bör samma fiskefria områden gälla.

Skydd av hälleflundra under lekperioden – ges starkt stöd av WWF då detta är en långsamt reproducerande art vars bestånd under lång tid har haft dålig status. Skydd under lekperioden för alla fiskarter är nödvändigt. WWF vill även rekommendera att man utökar hälleflundrans skydd så att fångst skall undvikas generellt till dess att beståndet är stabilt. Samma inställning bör i grunden gälla alla broskfiskar och andra stora rovfiskar i området.

Fiskerisjökort – WWF förutsätter att detta fiskerisjökort är mer detaljerat än vanliga sjökort. Namnet kan dock ifrågasättas då det kan uppmuntra till fiske vilket inte borde vara avsikten. Ett detaljerat sjökort ska noga betona de fiskefria områdena och förtydliga var olika aktiviteter kan ske. Förslag är att kalla det Natura 2000 sjökort - Bratten i stället.

Fångstregistrering – det är bra med ett utökat rapporteringssystem även för sportfisket anser WWF. I rapporteringen ska fiskade arter men även oönskade arter och förlorade redskapsdelar dokumenteras för de områden där man tillåts fiska. Här bör man förtydliga att denna fångsregistrering gäller allt icke-kommersiellt fiske, även för fiskare med yrkesfiskelicens.

Utbildning / kunskapsöverföring – att sträva efter utökat samarbete mellan sportfisket, lässtyrelsen, HaV och forskningsinstitutioner för att få mer kunskap är en positiv ansats. Även förslaget om inrapportering från yrkesfisket om oönskade arter i trålen är bra, även om utgångpunkten givetvis är att inget oönskat ska finnas i trålen om fisket bedrivs på ett mer skonsamt sätt. WWF anser att förslagen har otydlig ansvarsfördelning så här långt.

Utveckling av skonsammare redskap är ett måste för fortsatt kommersiellt fiske som ska kunna anses hållbart även utanför skyddade områden. Enligt WWF går denna process alltför långsamt framåt. Genomförandet av kamera ombord för att kunna verifiera fångst och bifångst behöver också skyndas på. Kameror ombord och test med kameror på trålbord bör vidareutvecklas för att etableras inom fisket.

Uppföljning - Ett nätverk av marina skyddade områden med relevanta fiskerestriktioner är en viktig åtgärd för att nå krav på god ekologisk status enligt EUs marina direktiv samt nationella och internationella miljömål. Det är alltså viktigt både med basdata och med möjlig uppföljning av data så att man kan avgöra effekterna av skyddet respektive frånvaro av fiskerestriktioner inom Natura 2000-området. Förslaget är att dokumentation med dropp- kamera/ROV bör ske vart sjätte år. WWF anser det vara väl lång mellantid och föreslår ett tidsintervall på vart fjärde år. Likaså anser WWF att fångststatistik och fiskeansträngning helst bör följas upp varje år men minst vartannat år och inte som förslaget nu ligger, vart tredje år.

Avslutningsvis sades, inför framtagandet av en förvaltningsplan för området, att visionen för Bratten ska vara - "Alla kan glädjas åt den dolda skatten i Brattens djupa vatten". För att uppnå den visionen anser WWF att det krävs en strikt fiskereglering av allt fiske inom Natura 2000 området.

Sportfisket bör ha samma områdesrestriktioner som yrkesfiske eller annan fiskeaktivitet. WWF vill även understryka att förvaltningen av den marina miljön rent generellt bör vara ekosystembaserad och skapa balans i syfte att få friskare hav med möjlighet till uthålligt fiske. Bevarande av ekosystemet och den fantastiska bottenfaunan i Bratten området kräver ett effektivt skydd som Havs- och Vattenmyndigheten och Länsstyrelsen Västra Götaland här har ett gyllene tillfälle att förverkliga.

För Världsnaturfonden WWF

Lovisa Hagberg
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10.4 Sportfiskarna

Yttrande angående förslag till fiskeregleringar i Bratten

Dnr 511-26027-2012

Sveriges Sportfiske- och Fiskevårdsförbund, Sportfiskarna, har tagit del av remissen och önskar lämna följande synpunkter.

Länsstyrelsen i Västra Götalands län har haft till uppdrag att se över fiskeregleringarna i Natura 2000-området Bratten, mot bakgrund av den skada som olika typer av fiskeredskap kan ha på de utpekade naturvärdena i området. Syftet är att de höga biologiska värdena (arter och livsmiljöer) ska ha en så kallad gynnsam bevarandestatus. I remissunderlaget anges även minskat fisketryck på utpekade fiskarter samt Sveriges åtaganden inom OSPAR som syfte med fiskeregleringarna.

Bakgrund Omkring 1998 började det svenska sportfisket på Bratten. Bakgrunden till sportfiskets intresse var att dålig förvaltning och en överdimensionerad fiskeflotta under 1900-talets sista decennier alltför effektivt decimerat, och i flera fall utrotat, många av de kustnära fiskbestånden. Utvecklingen av den stumma flätlinan möjliggjorde fiske på stora djup, samtidigt som moderna ekolod och navigationsinstrument blev mer prisvärda och därmed tillgängliga för vanliga sportfiskebåtar. Det svenska havsfisket fick därmed en nystart och svenska sportfiskerekord på hälleflundra, vitrocka, klorocka, gråsej, håkäring, lubb, kolmule, skoläst och blåkäxa kom inom några år från Brattens ravinsystem. Många av dessa rekord står sig än idag.

Eftersom fisket så långt ut till havs är helt begränsat till perioder med svaga vindar rör det sig om ett mycket begränsat antal båtar som besöker området varje sommar. Fisketrycket är därmed lågt, men området och fångsterna i sig genererar ett intresse för svenskt havsfiske som inte funnits på flera decennier. Med undantag av lubb, vars tryckkänslighet omöjliggör återutsättning, bedrivs sportfisket med en mycket stor grad av återutsättning av fisk. Detta anses vara en väl fungerande metod för de broskfiskar som fångas av sportfiskare, främst vitrocka och blåkäxa. Sammantaget är Brattens ravinsystem en helt unik plats och utgör kärnan i det svenska djuphavsfisket.

Krav på AIS Prisbilden som i remissunderlaget presenteras av länsstyrelsen, en kostnad på ca 500 dollar eller 3200 kr, stämmer inte överens med prisbilden som presenteras av svenska distributörer. För att ha en utgående AIS-signal krävs dels en så kallad klass B-transponder, dels att transpondern har en egen GPS-antenn. Kostnaden för detta förefaller ligga på ca 7000 kr och uppåt, vilket är en icke obetydlig kostnad för den genomsnittlige fritidsfiskaren som fiskar en gång/år på Bratten. Om man dessutom vill kunna ta emot andra båtars AIS-signaler behövs en kompatibel kartplotter, vilket innebär en kostnad på minst 5000 kr för den som inte redan har en sådan.

Ur övervaknings- och säkerhetssynpunkt är AIS-systemet väl fungerande, men om inte kostnaden minskar avsevärt är det helt enkelt inte rimligt med ett krav på AIS för sportfiskebåtar. I dagsläget finns det ingen annan anledning för en fritidsbåt att ha en AIS-transponder.

Ankringsförbud Sportfiskarna har i tidigare underlag sagt att ett ankringsförbud kan tyckas onödigt då sportfiskebåtar i huvudsak undviker att ankra nere i ravinen på grund av risken att fastna, men är inte emot ett ankringsförbud som innebär att ankaret kan läggas i ravinens närhet. I nuvarande förslag är zonerna för de områden undantagna för sportfiske så breda att fiske från ankrad båt i ravinens närhet i de flesta fall omöjliggörs. Eftersom ett normalt fiskepass på Bratten för många innefattar ankring under natten begränsas därmed tillgängligheten alltför kraftigt.

Fångstregistrering Sportfiskarna är positiva till förslaget att sportfiskets fångster ska sammanställas på ett bättre sätt än bara genom Sportfiskarnas så kallade Storfiskregister, men anser inte att samtliga fångade individer av alla arter måste registreras. För de pelagiska arterna makrill och gråsej som inte är upptagna som skyddsvärda arter kan man fråga sig om fångstrapportering är nödvändig. Vi ansvarar gärna för utformningen av ett fångstprotokoll, i samråd med länsstyrelsen.

Påverkan på bottendjur och habitat I det ursprungliga arbetsmaterialet påstods sportfisket ha en betydande påverkan på hornkoraller och andra höga naturvärden, i form av avslitna tackel, fiskelinor insnärjda i koraller och losslitna korallfragment nedanför klippväggar. Sportfiskarna har flera gånger ifrågasatt rimligheten i detta och efter vår genomgång av det aktuella bildmaterialet från Göteborgs

universitets ROV-filmer visade det sig att de rester av linor, tågvirke och garn som visas med stor säkerhet härrör från andra verksamheter än sportfiske. Endast i ett enda fall syns ett föremål som med största sannolikhet borde vara ett sportfisketackel, som dessutom ligger på mjukbotten och är övertäckt av sediment. Ingen annan form av påverkan som skulle kunna knytas till sportfiske har noterats.
Sportfiskarna poängterar återigen att det med utgångspunkt från vad bildmaterialet visar inte finns något som på sakliga grunder styrker påståendena om att sportfisket förorsakar skador på bottenmiljön. Det är enligt vår uppfattning inte vare sig rimligt eller troligt att finna skador av sådan omfattning förorsakade av sportfisketackel med utgångspunkt från redskapens utformning och dimensioner, från hur fisket oftast bedrivs (stillaliggande båt), från omfattningen på fisket samt från storleken på det aktuella området.
Sportfiskets fångster i jämförelse med fångster landade av yrkesfisket får anses som en helt obetydlig andel, förutom möjligtvis för lubb. För just denna art har dock vårt eget Storfiskregister, i nuläget den enda fångstdata som finns från sportfisket i området, inte visat att storlek och åldersstruktur skulle ha ändrats. 2011 och 2012 var tvärtom de bästa åren i Storfiskregistrets historia för lubb över 10 kilo, som är minimivikten för registrering.
För hornkoraller, svampdjur, sjöpennor och andra utpekade naturvärden måste påverkansgraden anses som nära obefintlig. Kriterierna för att en art ska anses ha en gynnsam bevarandestatus – alltså att antalet inte minskar, det naturliga utbredningsområdet inte minskar och att det kommer att finnas en tillräckligt stor livsmiljö för arten att finnas kvar i – kan därmed rimligtvis inte anses överskridas, vare sig för fisk eller andra utpekade naturvärden.
Vi anser att inskränkningarna mot sportfiskets tillgänglighet på Bratten är oproportionerliga. En potentiell risk för att sportfiskare ska trassla in sig i hornkoraller kan inte vara tillräckligt för att motivera en så pass kraftig inskränkning i möjligheterna till sportfiske i den utsträckning som i aktuellt förslag. Tvärtom är fördelarna med sportfisket många. Sportfisket ställer främst kvalitativa anspråk på resurserna, bidrar till viktig kunskapsinsamling genom fångster, lämpar sig väl för fångst av fisk som ska märkas och utgör dessutom en informell tillsynsresurs i skyddade områden. Metoder och redskap är fångstselektiva och skonsamma för den omgivande miljön, men med en reglering via föreskrifter har man ändå möjlighet att enkelt se över regleringsfrågan om så anses behövas.
Det är uppenbart att man i processen för att ta fram en förvaltningsplan inte har haft en tillräcklig kunskap om olika fiskemetoders påverkansgrad. Vi understryker att det måste finnas en proportionalitet vad gäller de framtagna förslagen på fiskeregleringar kopplat till påverkansgraden av de olika fiskeredskapen. Trots exempel på zonerad förvaltning i förslaget jämställs uppenbarligen sportfiskets *potentiella* påverkan i stor omfattning med exempelvis den dokumenterade påverkan som bottentrålning genererar i form av trålspår i mjukbottnar och resuspension av partiklar som innebär en mycket hög turbiditet, med igensedimentation av stora geografiska områden som följd. Sportfiskarna anser jämförelsen som osaklig och det verkar helt enkelt inte ha skett en rimlighetsbedömning i ärendet.
Mot bakgrund av detta anser Sportfiskarna:
• Att förslaget gällande ett krav på AIS för sportfiskebåtar diskuteras vidare med hänsyn till kostnaden.
• Att förslaget på ankringsförbud för sportfisket slopas, alternativt att ankring tillåts i de zoner där enbart sportfiske är tillåtet.
• Att en mer omfattande fångstregistrering är bra, men att den inte bör omfatta pelagiska arter som makrill och gråsej.
• Att sportfiskets tillgänglighet till området ökar jämfört med nuvarande förslag.

Anders Karlsson Markus Lundgren Chef fiskevård och resursförvaltning Handläggare

10.5 Sveriges Fiskares Riksförbund

Ang. remiss – förslag till fiskeregleringar för Natura 2000-området Bratten i svensk ekonomisk zon i Skagerrak (dnr 511-26027-2012)

Sveriges Fiskares Riksförbund (SFR) har mottagit rubricerad remiss och beretts tillfälle att avge yttrande; SFR vill i anledning därav framföra de följande synpunkterna:

Syften med förevarande förslag anges vara att säkerställa att de stora marina naturvärdena i området finns kvar även i framtiden och att kunna möta Sveriges åtagande inom OSPAR.

Inledningsvis önskar SFR ge länsstyrelsen positiv kritik och beröm för det sätt varpå processen ägt rum, alltsedan den startade i mars 2012; icke desto mindre har SFR de följande synpunkterna på det remitterade förslaget:

De stora marina naturvärden som finns kvar i området Bratten finns faktiskt kvar trots den verksamhet som har bedrivits där sedan länge i form av yrkesfiske. Dåtidens yrkesfiske bedrevs inte på långa vägar med så bra utrustning som nu för tiden är standard och insikten om vikten av att skydda skyddsvärda marina naturvärden existerande inte då som den gör nu inom yrkesfiskarkåren. Vad som avses här är självklart det förhållandet att **dagens moderna fiske är betydligt mycket bättre även utifrån ett strikt miljöperspektiv än vad gårdagens fiske var**, något som insikt om synes finnas (”de flesta skador man har sett på hårdbottenmiljöerna i form av förlorade trålar och tråldelar kommer från tidigare trålningar i de här områdena” [s. 6]). Detta till trots finns fortfarande mycket stora marina skyddsvärda naturvärden kvar, en omständighet som enligt vår mening kanske inte direkt leder till ett skriande behov av åtgärder. SFR har dock full förståelse för åtgärdsbehovet utifrån en samlad bedömning i viss mening. Inledningsvis vill vidare påtalas den stora betydelse som Bratten har haft sedan länge och fortfarande har såsom fiskeplats där goda fångstmöjligheter finns. Detta innebär att **området är av största betydelse för svenskt yrkesfiske** även framöver.

I förordet beskrivs att yrkesfiskare upplever processen som att människor klampar in och möblerar om på deras arbetsplats utan tillräcklig kunskap och samtidigt riskerar att slå undan fötterna på dem rent ekonomiskt. Beskrivningen är korrekt, men därtill bör läggas en samsyn och det gemensamma intresset av att skydda det som verkligen är skyddsvärt och unikt och **motståndet mot att skydda sådant som inte har något skyddsbehov, men som negativt drabbar en pågående näringsverksamhet och därigenom lönsamhet, sysselsättning och indirekt även fiskets infrastruktur**. Med andra ord är det viktigt att ha någon form av **proportionalitet** och **balans** i synen på vad som är skyddsvärt på bekostnad av närande verksamhet i form av yrkesfiske, och **särskilt så när yrkesfiske bedrivits på platsen sedan mycket lång tid tillbaka och det som är skyddsvärt *de facto* fortfarande finns kvar**.

Vi delar rent principiellt inte den uppfattning som ges uttryck för i sammanfattningen att det för att se till att arter och livsmiljöer finns kvar även i fortsättningen behövs regleras fisket i området ytterligare än vad som redan i dag är fallet. Icke desto mindre förstår vi väl behovet av att göra så utifrån en samlad bedömning, därav detta remissvar och vårt förhoppningsvis så uppfattade konstruktiva deltagande i processen.

I det följande anges kommentarer i samma ordning som anges i förslaget och med referens till var det som kommenteras återfinns i förslaget.

I inledningen (s. 3) anges fullständigt korrekt att regleringen av yrkesfisket i förevarande fall är en fråga för den gemensamma fiskeripolitiken; SFR är tacksamma för denna insiktsfulla och korrekta uppfattning.

Fiskefria zoner

SFR förstår och accepterar utifrån en samlad bedömning behovet av vissa fiskefria zoner i området. **När man inrättar sådana fiskefria zoner är det enligt SFR:s bedömning viktigt att så sker på ett balanserat och proportionellt sätt så att syftet nås, utan att för den skull vara mer långtgående i negativa effekter för andra (yrkesfisket) än vad som behövs för att nå just syftet med inrättandet av fiskefria zoner**.

När det anges (s. 6) att ”även några områden som är relativt otrålade idag bör skyddas framöver, trots att man idag inte har någon kunskap om vilka arter som finns där, eftersom förutsättningarna för att man ska hitta fler arter där är stora” har man enligt SFR:s uppfattning kommit **principiellt fel**. Syftena med förslaget anges vara att säkerställa att de stora marina naturvärdena i området finns kvar även i framtiden och att kunna möta Sveriges åtagande inom OSPAR. **En grundläggande förutsättning för att skydda något torde vara att ha**

vetskap om vad man skyddar, annars är skyddet fullständigt godtyckligt och kan inbegripa vad som helst. En sådan form av godtycklighet kan inte anses vara något som är eftersträvansvärt i något avseende. Vad gäller det stora fiskefria området i väster (zon 14, figur 2) kan vi inte se att nyttan av ett så stort område skyddas, eftersom man inte vet vad man skyddar genom att skydda och då är det hela egentligen ganska meningslöst. Skydda i stället där det nordvästra området vari skyddsvärda naturvärden finns.

SFR anser att det idag, med modern navigationsutrustning som med noggrann precision fungerar på metern när, är **alltför långtgående med buffertzoner om 250 meter**. SFR föreslår i stället att skyddet fastställs i enlighet med de exakta uppgifter som inlämnats av fiskare som är verksamma i området. Anledningen till detta är att **alltför stora buffertzoner leder till minskat manöverutrymme, som leder till ökade säkerhetsrisker för manskap och fiskefartyg vid navigering under svåra vind- och strömförhållanden, något som hela området är känt för**.

I omtalet om korridorer och passager är det viktigt att vetskap finns om hur fisket fungerar; det är **inte båten som sådan som fiskar utan det redskap som följer bakom den** (framgår på s. 16, sista stycket under rubriken ”Problem med VMS”). Avstånden kan här variera, men det centrala är – vilket poängterats under många samrådsmöten etc. – att **redskapet fiskar och kan vålla skada, inte båten**. Det sagda innebär att båtar kan driva över områden som det är förbjudet att fiska på utan att fiske därmed sker i den fiskefria zonen; detta är något som det är mycket viktigt att ha kunskap om utifrån ett kontrollperspektiv (jfr s. 16 f.).

Utifrån vad som framgår av figur 4 (s. 10) formulerar SFR följande konkreta uppfattningar:

- **buffertzonerna bör inte generellt fastställas till 250 meter;**
- **med avseende på samtliga föreslagna områden har fiskare angett de exakta områden som är i behov av skydd; dessa områden är i förslaget vidlyftigt tilltagna och bör samtliga minskas;**
- **t.ex. bör område 4 utgå i nuvarande form, utifrån förhållandet att då det fiskas och har fiskats mycket här och det som är skyddsvärt finns kvar kommer det som är skyddsvärt att finnas kvar även om fiske sker där i framtiden och då området är av central betydelse för fiskets bedrivande bör det, som angetts, utgå (förslag från fiskare på skydd av delar av det föreslagna område 4 har ingetts och dessa områden kan lämpligen skyddas);**
- **område 14, skydda den nordvästra delen som är skyddsvärd – inte hela området; samt**
- **vad gäller områdena 9A och 9B bör dessa särskilt ses över och endast det som är skyddsvärt skyddas.**

Krav på AIS (s. 13 och 16)

SFR har **inget att invända mot förslaget att det ska vara obligatoriskt med AIS-sändare** som sänder båtens position var 30:e sekund för att få fiska i Natura 2000-området.

Minskad fångstansträngning (s. 13)

SFR anser att förslaget i sig är grundlöst och inte når något av de syften som förslaget anges tillfredsställa. **Att begränsa trålningen efter räka i området till att endast vara tillåten måndag – torsdag varje vecka är inte inom ramen för uppdraget enligt SFR:s uppfattning**. En sådan effortreglering av räkfisket är inte eftersträvansvärd utifrån något objektivt syfte och hämmar den enskilde räkfiskarens handlingsfrihet till ingen nytta. **SFR motsätter sig således förslaget**.

Ankringsförbud (s. 13)

SFR har inget att invända mot förslaget.

Övriga åtgärder som föreslås (s. 13 ff.)

Under rubriken ”Utsättning av broskfiskar” refereras till kommande utkastförbud; huruvida broskfiskar ska omfattas av ett utkastförbud eller ej återstår att fattas beslut om.

Slutsatsen som dras, vad gäller skydd av hälleflundra under lekperioden, att det inte är rimligt, varken ur biologisk eller utifrån förvaltningsmässig synvinkel, att lekfisk som skyddas enligt svenskt och norsk lag, kan fiskas upp av danska fiskebåtar är fullständigt korrekt.

SFR har inget att invända mot vad som sägs om fiskerisjökort i digital form och ej heller mot vad som sägs om sportfisket i övrigt i förslaget i denna del (s. 14); detsamma gäller inrapportering av ovanliga arter till Göteborgs universitet (Institutionen för biologi och miljövetenskap).

SFR stödjer och önskar delta fullt ut i utvecklandet av mer skonsamma och selektiva fiskeredskap. Frågan om det är möjligt att till rimliga pengar möjliggöra för en AIS-sändares placering på trålen, som skisseras på s. 16, bör tittas närmare på.

Vad som sägs om **uppföljning är viktigt**; det är vidare i detta sammanhang av största betydelse att verka för att få **utökad kunskap om omfattningen av det som genom förslaget skyddas i ett större geografiskt perspektiv varigenom frågan om utformningen av skyddet, som föreliggande föreslag innehåller, kan ses i ett större sammanhang, särskilt så visavi det yrkesfiske som sker i området och det föreslagna skyddets negativa effekter på detsamma**.

Åtgärder som redan är genomförda (s. 15)

Den nya tekniska regleringen som är på plats sedan den 1 januari 2013 innebär ett mer selektivt fiske, med mindre bifångster. Det som sägs om utkastförbud är ej korrekt, situationen är nu sådan att ett **utkastförbud kan förväntas träda i kraft först den 1 januari 2015, men kanske mer sannolikt den 1 januari 2016**. **Överenskommelsen mellan Norge, Danmark och Sverige om ett utkastförbuds införande är överspelad och utkastförbudet som införs kommer att vara detsamma som följer av den nya gemensamma fiskeripolitiken**.

Kontroll av att fiskereglerna följs (s. 16)

Bestämmelser som inte kan kontrolleras har ett mindre värde än bestämmelser som kan kontrolleras. Beskrivningen i andra stycket är väldigt träffande, och det är viktigt att här framhålla att lejondelen av den svenska yrkesfiskarkåren är regelefterlevande fullt ut. Vad som sägs om incidentrapport är viktigt att ha i åtanke.

Beskrivning av området (s. 17 ff.)

SFR ställer sig högst tvivlande till riktigheten av att såsom skyddsvärt naturvärde utifrån Natura 2000-regleringen ange ”större fiskar knutna till rev och pockmarks”, såsom görs på s. 18.

På s. 19 refereras till rödlistade arter, vilka anges i bil. 3; en kommentar härtill är att **listningen är besynnerlig utifrån ett fiskets perspektiv emedan torsk förekommer på listan och verkligheten för dagens fiskare visavi dagens kvotsituation är att man får undvika att fånga torsk, som således förekommer i riklig mängd**.

Fiske i området (s. 27 ff)

Av beskrivningen framgår korrekt att området är av **oerhört stor betydelse för svenskt räkfiske**. Området är härutöver även av **oerhört stor betydelse för annat svenskt fiske**, vilket också korrekt framgår av texten.

Analys av påverkan från fisket (s. 30 ff.)

Det sägs att bottentrålning kan jämföras med ett intensivt jordbruk, liknelsen är - som så ofta när yrkesfisket ska beskrivas - i **överord**; trålning är mer att jämställa med jordbruk. Intensiva jordbruk tenderar att beskrivas som sådana med stor insats av växtnäring och bekämpningsmedel (enligt Nationalencyklopedin). Bottentrålning kan ske utifrån samma drag över mycket lång tid, vilket indikerar att livsvillkoren inte påverkas negativt av bottentrålningen.

”I de ROV-filmningar som har gjorts på Bratten är skillnaden mellan trålade och otrålade bottnar stor” sägs det; därefter sägs ”I trålade områden saknades rören och antalet sjöpennor var mycket mindre eller helt borta”. En slutsats utifrån detta förhållande, *om* det nu är fullständigt korrekt, borde rimligen kunna vara att låta fisket fortgå på de platser som trålats och inrätta fiskefria zoner där trålning inte skett.

Avslutande kommentar

Avslutningsvis vill SFR framhålla det för oss självklara: det fiske som sker i området sker för att möta den efterfrågan på fiskprodukter som finns (livsmedelsförsörjning) och i enlighet med gällande regler (ansvarsfullt företagande på naturens och lagstiftarens villkor). Genom fisket säkerställs traditionell sysselsättning av stor regional betydelse och fiskeföretagen tjänar pengar, varigenom stat och kommuner får inkomster i form av skattepengar. För att kunna fortleva som näring måste fisket ha fiskeplatser där det är lönsamt att fiska. Det är oerhört viktigt att finna en fungerande balans mellan villkoren för fiskerinäringens fortsatta bedrivande och graden av skydd för hornkoraller, svampdjur, medusahuvud m.m.

Med vänlig hälsning

SVERIGES FISKARES RIKSFÖRBUND

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