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0.1	22/08/2012	Sophie Elliot	Text from Marine Scotland incorporated in section 8
0.2	23/3/2013	Declan Tobin	Review
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Draft Stanton Banks Site of Community Importance Fisheries Measures

Stanton Banks was submitted to the European Commission as a Candidate Special Area of Conservation (SAC) in August 2008 and approved by the Commission as a Site of Community importance (SCI) on 22 December 2009. Member States have a maximum of 6 years from the site being adopted as a SCI to implement the necessary management measures and formally designate the site as a SAC.

Under Article 6 of the Habitats Directive, Member States have a duty to take appropriate steps to avoid the deterioration of natural habitats for which SACs have been designated. Commercial fishing has been identified as an activity which could adversely impact the integrity of the site's features and as such requires to be assessed and, if necessary, managed to reduce its impact.

The Commission has issued guidance on a consistent approach to requests for fisheries management measures under the Common Fisheries Policy setting out the minimum information requirements for Member States requesting fisheries management measures. Accordingly, this document provides the scientific and technical information required to support a formal request to the Commission for fisheries regulation under the CFP.

1 Comprehensive description of the natural features including distribution within the site

Stanton Banks SCI is located in the Scottish Continental Shelf Regional Sea (JNCC, 2004a; Defra 2004), and lies approximately 124km west of the UK mainland, 43km WSW of Tiree and 83km NNE of Malin Head (Ireland). The site contains bedrock reef, which meets the definition of the Annex I habitat 'Reef'.

Stanton Banks are a series of granite rises which outcrop from the seafloor south of the Outer Hebrides. The rocky outcrops rise from the seabed at 190m to approximately 62m from the sea surface, encompassing a vertical rise of approximately 130m. The inter-connecting gullies are filled with rippled coarse shell sand. The tops of the banks are smooth and characteristically colonised by encrusting red algae and a variety of small encrusting sponges. On the slopes, where the rock is less smooth, featherstars (*Leptometra celtica*), dead man's fingers (*Alcyonium digitatum*) and hydroids (*Tubularia* spp.) are abundant (Service and Mitchell, 2004). At their edges, the banks are fringed with boulders and cobbles.

In the areas of the banks which have been surveyed (as of 2008), the biological communities represent moderately exposed/exposed circalittoral bedrock reef habitat of the Scottish Continental Shelf Regional Sea. For more information refer to JNCC (2008).

The proposed boundary is a complex polygon enclosing the minimum area necessary to ensure protection of the Annex I habitat. Refer to section 3 for more details on the boundary for this site.

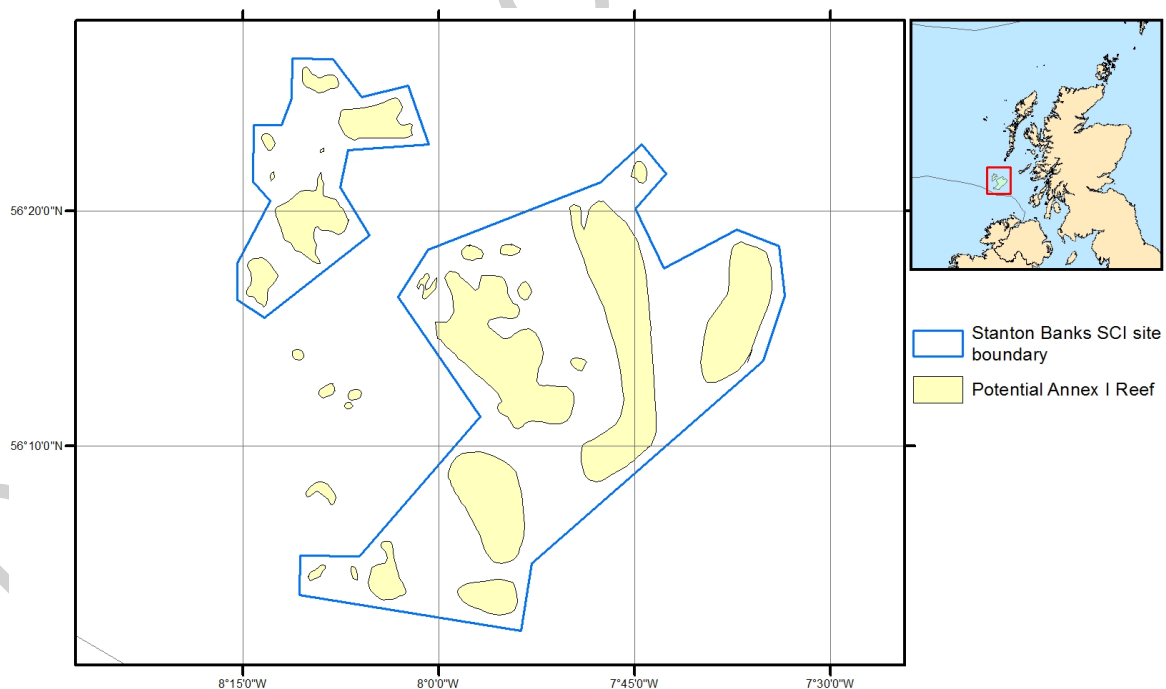


Figure 1: Stanton Banks Site of Community importance (SCI) boundary including potential annex reef layer using modelled data.

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.

The information presented here is taken from the Stanton Banks SAC Selection Assessment (JNCC 2008) which was the basis for the Natura 2000 standard data form and provided the rationale for the site's selection. In some cases, more recent data has become available since the designation of the site and, where relevant, this is also provided.

2.1 Representativity

The Stanton Banks site is located in the Scottish Continental Shelf Regional Sea and represents hard bedrock and boulder reef in full salinity, subject to intermediate coastal influence. The banks are of high to medium topographic complexity due to their fissured nature (Service and Mitchell, 2004). The faunal communities on these offshore rocky banks are characteristic of those present on exposed to moderately exposed circalittoral hard substrata in deep waters (Connor *et al.*, 2004). They consist largely of encrusting fauna such as red coralline algae, barnacles and serpulid worms, sponges (including small sponges crusts, cup-shaped Axinellid sponges (*Axinella infundibuliformis*) and massive sponges (*Mycale lingua* and *Pachymatisma johnstonia*)), robust hydroids and more mobile fauna such as featherstars and brittlestars (Service and Mitchell, 2004). The grade for the feature is A (excellent representativity). Refer to JNCC 2008 for more detail.

2.2 Area of habitat

The reef feature covers approximately 29,000 hectares (flat mapped extent) (Graham *et al.*, 2001). An estimate of the entire Annex I reef resource (bedrock, cobble and biogenic reef) in UK waters is 5,723,600 hectares (UK Favourable Conservation Status Reporting 2007). This site's feature falls within the '0-2%' bracket (extents less than 114,472 ha) for Area of Habitat and is graded C.

2.3 Conservation of structure and functions

Degree of conservation of structure

At the Stanton Banks SAC, there is no direct evidence of damage to or deterioration of the reef feature. However, the feature is currently exposed to the use of static fishing gear, and may in future be exposed to mobile fishing gears, which can expose the feature to pressures to which it is moderately or highly sensitive.

Previously, available VMS data and evidence collected from stakeholders suggested that demersal fishing has occurred over the Stanton Banks reef feature within the sites boundaries (Comhairle nan Eilean Siar, 2008). There was no evidence to suggest that the activities occurring within the site impacted the physical structure of the reef. Therefore the structure of the feature is graded II: structure well conserved

Further evidence from stakeholders (Stanton Banks Management Workshop, 2011) and higher resolution VMS data indicates that mobile demersal gear effort within the site boundary does not overlap with the reef feature. Refer to section 7 and figure 2, for more information.

Degree of conservation of functions

The prospects of this feature maintaining its structure in the future (taking into account unfavourable influences and reasonable conservation effort) are excellent. Fisheries management, where required, will be realised through the CFP, and regulations are in place to regulate oil and gas activity in and around SACs in the UK Continental Shelf Designated Area, should oil and gas exploration/exploitation occur in this region. The laying of submarine cables and pipelines also requires regulatory consent. The banks are distant from terrestrial sources of pollution. The conservation of function of the feature is graded I: excellent prospects (JNCC, 2008).

Restoration possibilities

Restoration of the biological communities on Stanton Banks would be possible accepting that restoration methods in the offshore area focus on the removal of impacts, which should allow recovery where the habitat has not been removed. Latest evidence suggests that static fishing is occurring over the feature while there is no evidence to suggest mobile demersal fishing is overlapping with the reef feature. However, management measures may still be required to preclude the risk of future exposure. The grade is II: restoration possible with average effort (JNCC2008).

2.4 Conservation Objectives

The Conservation Objective for the Stanton Banks SCI is to restore the Annex I reef to favourable condition.

The conservation objective to “Restore” implies that the feature is likely to have been degraded to some degree. In the absence of direct evidence of damage or deterioration, where activities associated with pressures to which the feature is sensitive overlap the feature, they may need to be managed to reduce or eliminate potential negative impacts. Restoration in the marine environment generally refers to natural recovery to favourable condition through the reduction or removal of adverse impacts.

At the Stanton Banks SAC, there is no direct evidence of damage to or deterioration of the reef feature. However, best available evidence indicates that the feature is currently exposed to the use of static (and potentially mobile) fishing gear which can expose the features to pressures (physical disturbance or abrasion and biological disturbance by selective extraction of species) to which it is moderately or highly sensitive.

3 Basis for the spatial extent of the site boundary clearly justified in terms of conservation objectives.

The proposed boundary for the Stanton Banks site has been defined using JNCC's marine SAC boundary definition guidelines (JNCC, 2008) and information provided during public consultation on this site in 2007-2008. The proposed boundary is a complex polygon enclosing the minimum area necessary to ensure protection of the Annex I habitat. Coordinate points have been positioned as close to the edge of the interest features as possible, rather than being located at the nearest whole degree or minute point.

The proposed boundary includes a margin to allow for mobile gear on the seabed being at some distance from the location of a vessel on the sea surface. The maximum depth of water around the feature is 190m; therefore, assuming a ratio of 3:1 fishing warp length to depth, the proposed boundary is defined to include a margin of 570m from the bedrock reef. The reef habitat feature extent is drawn from interpolated data from British Geological Survey (BGS) mapped at a scale of 1:250,000 (Graham *et al.*, 2001). Refer to Conservation Objectives and Advice on Operations document written for Stanton Banks SCI for more detail.

4 Threats to the long-term natural distribution, structure and functions of the habitats and the long-term survival of associated species from different types of fishing gear. List of other human activities in the area that could damage the habitats.

4.1 All demersal towed gears (including scallop dredges, beam trawls and otter trawl)

Four small areas have been identified within the site that are regularly fished by demersal trawlers targeting *Nephrops* but do not contain Annex I reef features (see figure 2). It is not considered likely that fishing within these areas will have a significant effect on the Annex I features.

The remainder of the site is not currently fished by these gears but if fishing were to occur in the future, it is likely that there would be a significant effect: whilst it is unlikely that demersal towed gears can affect the long-term natural distribution of granite bedrock reef features, there is some evidence to indicate that the use of bottom contacting mobile gears can impact the structure and function of the habitat and the long term survival of its associated species.

The use of towed fishing gears is likely to cause damage or death of fragile, erect species, such as sponges and corals (Løkkeborg 2005, Freese *et al.* 1999). Other species such as hydroids, anemones, bryozoans, tunicates and echinoderms may also be vulnerable (McConnaughey *et al.* 2000, Sewell and Hiscock 2005). Recovery is likely to be slow (Foden *et al.* 2010). Where fragile, slow growing species occur, even low levels of fishing have the potential to change the structure and function of the habitats and may result in the loss of some characteristic species.

4.2 All demersal static gears (including gillnets, trammel nets, longlines, pots and traps)

Intensity of static gear fishing in this site is low and it is considered unlikely that this activity poses a significant risk to the long-term natural distribution, structure and functions of the habitats or the long-term survival of associated species. If fishing intensity were to increase to high levels in the future, there is a risk of significant impact to the structure and functions of the habitats.

Mechanical impacts of static gear (e.g. weights and anchors hitting the seabed, hauling gear over seabed, rubbing / entangling effect of ropes) can damage some species (Eno *et al.*, 1996). Other species appear to be resilient to individual fishing operations but the effects of high fishing intensity are unknown (Eno *et al.*, 2001). Recovery will be slow (Foden *et al.*, 2010) resulting in significant reduction or even loss of characteristic species. The individual impact of a single fishing operation may be slight but cumulative damage may be significant (Eno *et al.*, 2001, Foden *et al.*, 2010). Sensitivity to low intensity potting is considered low (Hall *et al.*, 2008) [JNCC and Natural England, 2011].

4.3 Other Human activities

There is a lack of detailed information on levels of exposure to human activities and their ecological impact on the feature at this site. Further information will be required to assess and monitor favourable condition of Annex 1 reef of this offshore SCI.

There are pressures associated with the activities of the Ministry of Defence; however there is insufficient information available to assess exposure and so vulnerability and risk of feature damage or deterioration from this activity is currently unknown (JNCC, 2012).

The reef features found within Stanton banks are sensitive to further pressures outlined within table 1 of Stanton Banks JNCC (2012).

5 Fleet activity in the area and in the region, distribution of fleets (by nation, gear, and species), and information on target and bycatch species, all over the last 3 years.

For the purpose of this analysis we have used the 2008 – 2010 reference period that was used in preparation for the workshop with fishermen to consider and develop the proposed management measures.

The Stanton Banks SCI straddles 2 ICES rectangles, and therefore the first analysis considered the fisheries value of these rectangles for demersal fisheries only. The following data in table 1 only includes UK vessels.

Rectangle	Gear type		2008	2009	2010
41 E1	Whitefish trawl	Tonnage	0	0	10
		Value	0	0	£18,000
		Target Species	n/a	n/a	Hake - 50%
	Nephrops Trawl	Tonnage	3	13	1
		Value	£6,000	£34,000	£3,000
		Target Species	Nephrops - 33%	Nephrops - 46%	Anglerfish - 100%
	Pots	Tonnage	10	1	0
		Value	£16,000	£1,000	£0
		Target Species	Brown Crab - 100%	Brown Crab - 100%	n/a
41 E2	Whitefish trawl	Tonnage	269	97	100
		Value	£247,000	£101,000	£107,000
		Target Species	Whiting – 34% Haddock -27% Hake – 27%	Hake – 56%	Hake – 64%
	Nephrops Trawl	Tonnage	44	79	18
		Value	£95,000	£212,000	£43,000
		Target Species	Nephrops - 61%	Nephrops – 50%	Nephrops – 41%
	Pots	Tonnage	67	151	85
		Value	£198,000	£313,000	£243,000
		Target Species	Brown Crab – 53%	Brown Crab – 79%	Brown Crab – 78%

Table 1 : Catches in ICES rectangles 41 E1 and 41 E2 between 2008 and 2010 for UK vessels

The vast majority of these catches are taken outwith the boundary of Stanton Banks SCI. The following is a subset of the previous dataset which has been attributed to within the boundary of the Stanton Banks SCI by marrying catch and value records for any given day to Vessel Monitoring System data where the average speed of the vessel between position reports is less than 5 knots. The catch and value for the day are divided equally between the VMS records which were identified. As only management of demersal trawl fisheries is being proposed the analysis is only considering these.

Year	Tonnes	Value
2008	58	£63,000
2009	57	£108,000
2010	34	£46,000

Table 2 : Total catch taken by UK demersal trawl vessels within the boundary of the Stanton Banks SCI

As can be seen from the charts below the majority of demersal trawl fishing activity takes place generally north of the boundary of the Stanton Banks SCI. There is no significant variation year on year.

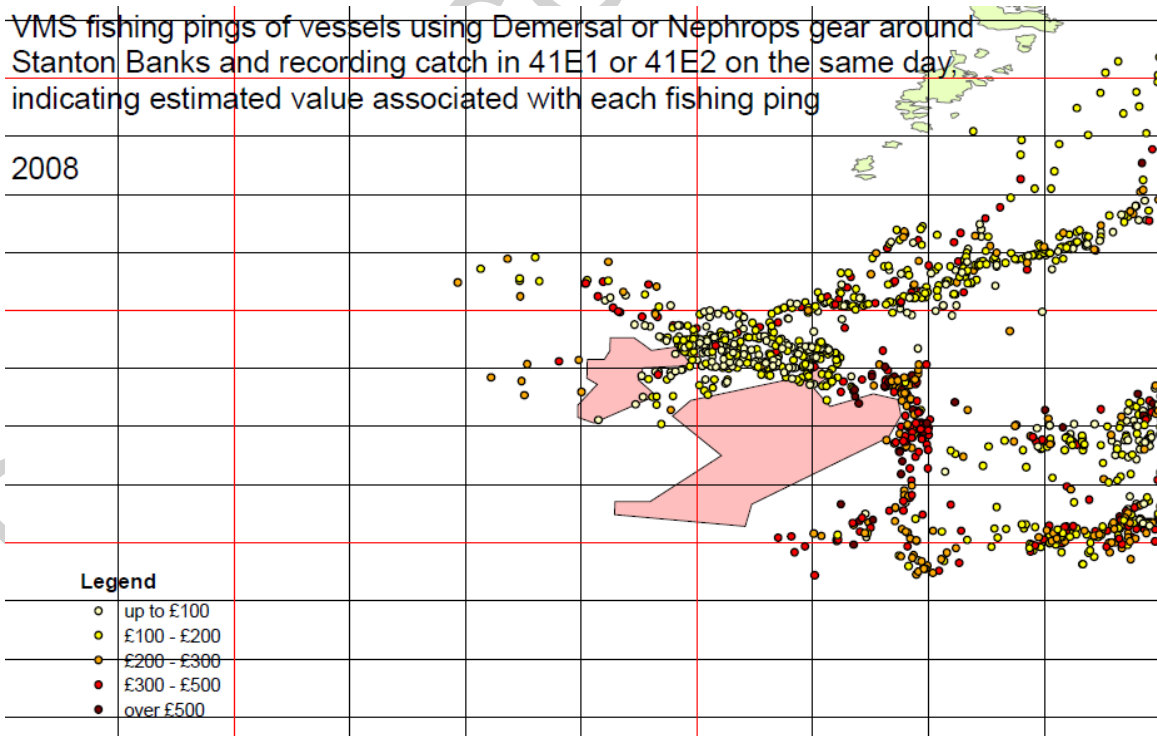


Figure 2 : Distribution of UK demersal trawl effort in 2008

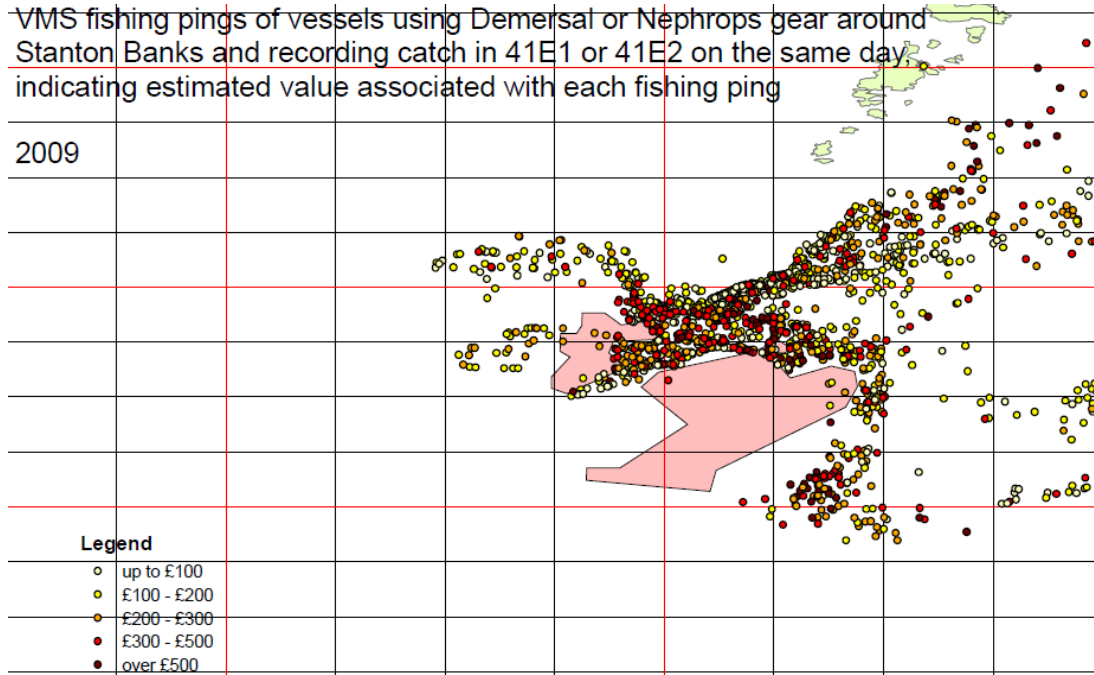


Figure 3: Distribution of UK demersal trawl effort in 2009

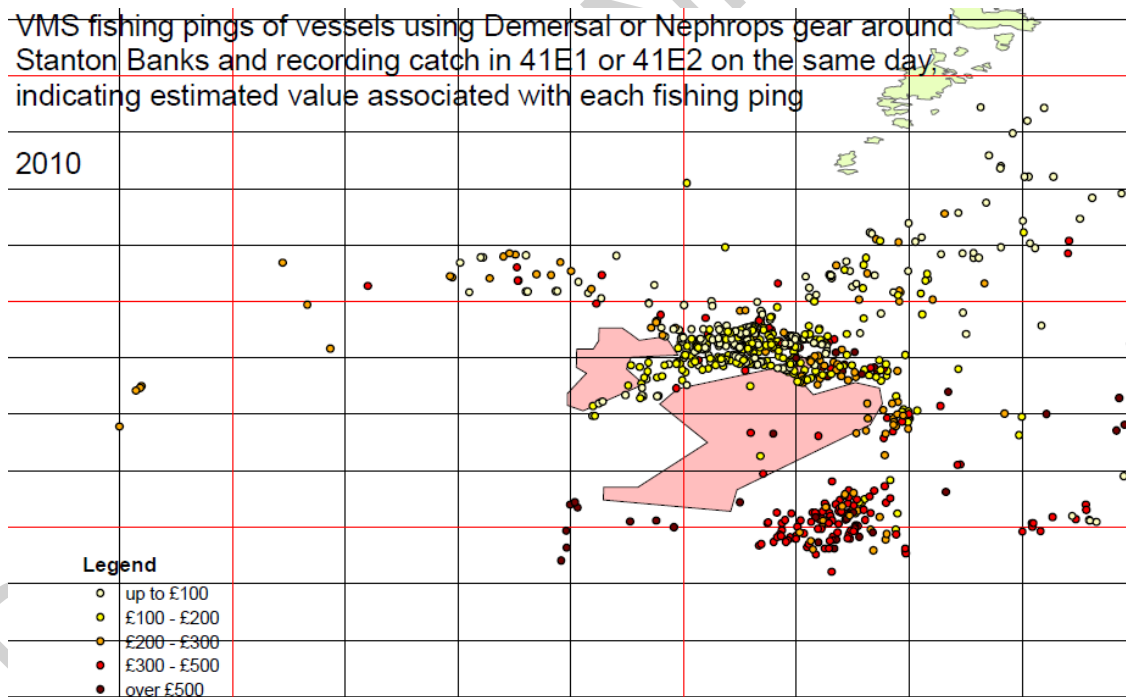


Figure 4: Distribution of UK demersal trawl effort in 2010

6 Seasonal trends in fisheries over the last 3 years.

There are no major seasonal trends in the fisheries for which management measures are being proposed.

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.

Having consulted with representatives of all fishing fleets active in the area (UK and Republic of Ireland) JNCC have advised that the following management measures will be required in order to achieve the conservation objectives of the site;

- Prohibition of fishing with bottom contacting gears (scallop dredges, beam trawls, otter trawls and seine nets) throughout the extent of Annex 1 features within the SAC (illustrated in figure 2, coordinates provided in appendix 1)
- No additional restriction on demersal towed gears in areas where Annex 1 reef does not occur (illustrated in figure 2, coordinates provided in appendix 1)
- No additional restriction on pelagic gears throughout the site.
- At present, no additional restriction on static gears (pots, gillnets and longlines are not currently used in the site) but continued monitoring of these fishing activities is required. If activity increases to high levels in the future, some restriction may be considered necessary.

The management measures proposed are designed to prevent any new demersal trawl fishing areas being developed. They will not prohibit the current and historic fishing grounds used by the UK and Republic of Ireland fleets. Consequently there is no loss of established fishing opportunities to the fishing industry.

Other management options considered were ;

- a) no additional management
- b) voluntary agreement
- c) closure of the entire area area to mobile bottom contacting gears
- d) closure of the entire area area to all gears

Options a and b were considered to pose a significant risk to the achievement of conservation objectives. Options c and d would reduce the risk to the lowest possible level but would place unnecessarily stringent restriction on the industry.

The proposed management measures are therefore the only option that was considered to be both precautionary and proportionate. The measures would be enforceable utilising Vessel Monitoring System, aerial surveillance, and ship surveillance. Given the participation of the industry in the development of these measures a high level of compliance is anticipated.

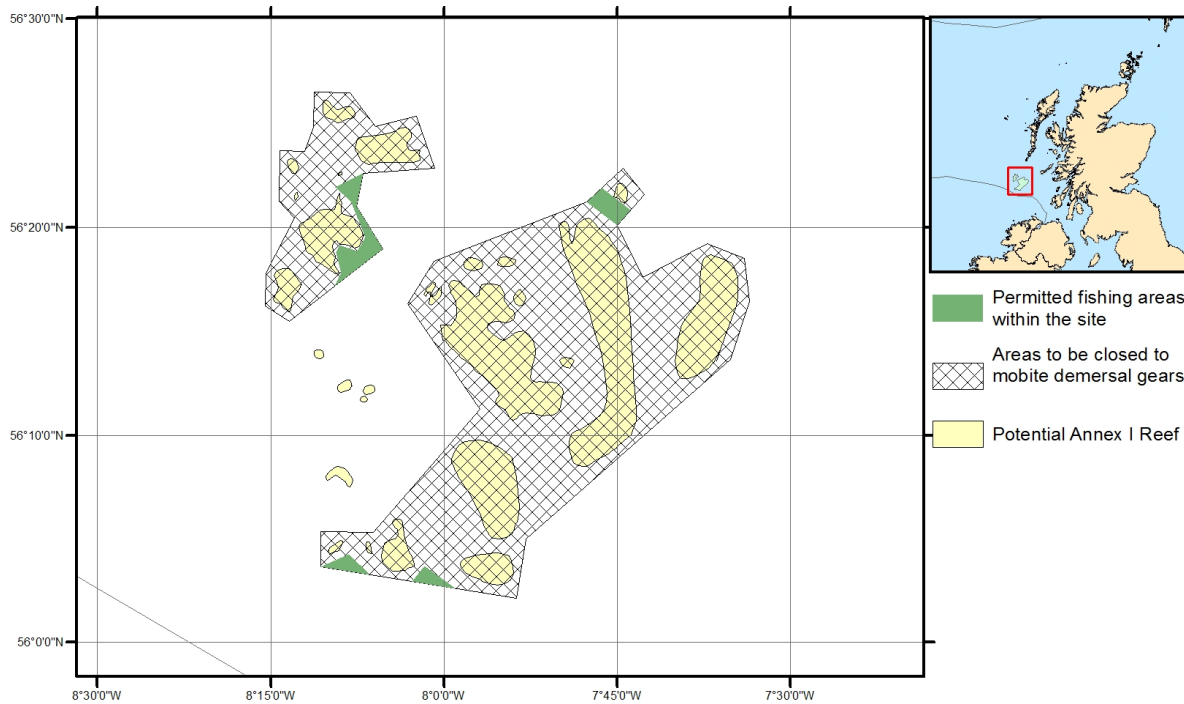


Figure 5: Areas to be closed to mobile demersal gears and areas in which no additional management will be required (permitted fishing areas).

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.

In light of the required management measures outlined in section 7, the following control measures should apply. There should be no demersal trawl activity within the SAC boundary, except in those areas where Annex 1 reef does not occur (identified in figure 2 above). The topography of the actual reefs provide a natural ecological buffer, insofar as they cannot be towed over, combined with the margins introduced by boundary setting guidance. This would also complement the historical fishing patterns at this location which should result in a high level of compliance and ensuring the reef features are not affected by demersal trawl activity.

Therefore the following 3 areas created by joining the following points sequentially are proposed for the prohibition of fishing with demersal towed gear.

Area 1

1. 56 26.467N 008 08.15W	13. 56 19.518N 008 06.778W
2. 56 24.85N 008 05.933W	14. 56 21.265N 008 08.08W
3. 56 25.333N 008 02.366W	15. 56 21.92N 008 09.399W
4. 56 22.85N 008 00.766W	16. 56 15.484N 008 13.4W
5. 56 22.584N 008 06.983W	17. 56 16.217N 008 15.467W
6. 56 21.013N 008 07.57W	18. 56 17.8N 008 15.434W
7. 56 18.978N 008 05.301W	19. 56 20.45N 008 12.917W
8. 56 17.181N 008 09.461W	20. 56 21.25N 008 14.25W
9. 56 17.801N 008 08.898W	21. 56 23.667N 008 12.033W
10. 56 18.807N 008 09.313W	22. 56 24.8N 008 11.283W
11. 56 19.154N 008 08.991W	23. 56 26.483N 008 11.25W
12. 56 18.866N 008 07.482W	24. 56 26.467N 008 08.15W

Area 2

1. 56 22.85N 007 47.633W	4. 56 21.89N 007 46.307W
2. 56 21.583N 007 42.6W	5. 56 22.85N 007 47.633W
3. 56 20.827N 007 43.81W	

Area 3

1. 56 20.1N 007 44.966W	12. 56 03.257N 008 06.36W
2. 56 17.583N 007 42.733W	13. 56 04.255N 008 08.287W
3. 56 19.2N 007 37.167W	14. 56 03.643N 008 10.67W
4. 56 18.516N 007 33.933W	15. 56 05.35N 008 10.633W
5. 56 16.433N 007 33.533W	16. 56 05.317N 008 06.1W
6. 56 13.633N 007 35.15W	17. 56 11.25N 007 56.833W
7. 56 04.1N 007 52.9W	18. 56 16.35N 008 03.15W
8. 56 02.116N 007 53.716W	19. 56 18.383N 008 00.817W
9. 56 02.596N 007 58.978W	20. 56 21.214N 007 47.633W
10. 56 03.707N 008 01.658W	21. 56 20.1N 007 44.966W
11. 56 02.933N 008 02.747W	

9 Measures to monitor and assess the maintenance and/or recovery of the features within the site.

Text to be provided by JNCC.

10 Coordination with neighbouring Member States as appropriate.

The measures proposed in this paper were developed utilising scientific and ecological data combined with practical environmental knowledge and data provided by the fishermen of the UK and Republic of Ireland who fish in this area.

11 Evaluation of possible displacement of fishing effort and impact on new areas.

There will be no displacement caused by the proposed measures as existing trawl fishing grounds within the Stanton Banks SCI will not be affected.

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