European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Conservation status assessment for the habitat:

H1220 - Perennial vegetation of stony banks

UNITED KINGDOM

IMPORTANT NOTE - PLEASE READ

- The information in this document represents the UK Report on the conservation status of this habitat, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- It is based on supporting information provided by the geographically-relevant Statutory Nature Conservation Bodies, which is documented separately.
- The 2019 Article 17 UK Approach document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Maps showing the distribution and range of the habitat are included (where available).
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the UK assessments. Further underpinning explanatory notes are available in the related country-level and/or UK offshore-level reports.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; and/or (ii) completion of the field was not obligatory.
- The UK-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

NATIONAL LEVEL

1. General information

1.1 Member State	**UK**
1.2 Habitat code	**1220 - Perennial vegetation of stony banks**

2. Maps

2.1 Year or period	1989-2018
2.3 Distribution map	Yes
2.3 Distribution map Method used	Based mainly on extrapolation from a limited amount of data
2.4 Additional maps	No

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs	**Atlantic (ATL)**
3.2 Sources of information	England Natural England. 2015. Atmospheric nitrogen theme plan: Developing a strategic approach for England's Natura 2000 sites (IPENSTP013) http://publications.naturalengland.org.uk/publication/6140185886588928?category=5605910663659520 Natural England. 2015.Climate change theme plan: Developing a strategic approach to climate change adaptation (IPENSTP014) http://publications.naturalengland.org.uk/publication/4954594591375360?category=5605910663659520 Natural England. 2015. Coastal management theme plan (IPENS TP019) http://publications.naturalengland.org.uk/publication/6371629661683712?category=5605910663659520 Natural England. 2015. Invasive species theme plan: Strategic principles for the management of invasive species on Natura 2000 sites (IPENSTP020) http://publications.naturalengland.org.uk/publication/6130001713823744?category=5605910663659520 Natural England. 2015.Public access and disturbance theme plan: A strategic approach to identifying and addressing significant effects on the features of Natura 2000 sites (IPENSTP022) http://publications.naturalengland.org.uk/publication/6621454219083776?category=5605910663659520 MURDOCK, A., HILL, A.N., COX, J. & RANDALL, R.E. 2010. Development of an evidence base of the extent and quality of shingle habitats in England to improve targeting and delivery of the coastal vegetated shingle HAP. Natural England Commissioned Reports, Number 054. http://publications.naturalengland.org.uk/publication/41015?category=43007 Houston, J.A., Rooney, P.J. and Doody, J.P. 2009. The conservation and management of coastal vegetated shingle in England: report of the meeting at Salthouse, North Norfolk 18 September 2008. Sand Dune and Shingle Network: Occasional Paper No. 1, Liverpool Hope University Press. http://www.hope.ac.uk/dmdocuments/Shingle_Report.pdf JNCC . 2013. Third report by the United Kingdom under article 17 on the implementation of the directive from January 2007 to December 2012. H 1220

Perennial vegetation of stony banks.
Scotland
Murdock, A.P., Hill, C.T., Randall, R., Cox, J., Strachan, I., Gubbins, G., Booth, A, Milne, F., Smith, S.M. and Bealey, C. 2014. Inventory of coastal vegetated shingle in Scotland - field validation. Scottish Natural Heritage Commissioned Report No. 739.
https://www.environment.gov.scot/our-environment/habitats-and-species/habitat-map-of-scotland/
Janine M Morris, Site Condition Monitoring of Coastal Habitats. (National Contract, Year 2009-2010) and Site Condition Monitoring of Coastal Habitats (National Contract, Year 2010-2011). Contract No: 25639
SNH Site Condition Monitoring results Cycle 3 (from 1 April 2012): see Scotland's environment website. [From the website Detailed tab, select Coastal features by clicking the Feature filter on the left of the screen, then Feature Category= Coast. Data can be exported to spreadsheet by right clicking the table at the bottom of the screen, then Export, then Export Table. Cycle 3 assessments can be seen by filtering the spreadsheet on the 'LatestAssessedSCMcycle' column].
Also
http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H1220_SCOTLAND.pdf
Wales
Colenutt, S., Denton, J. & Godfrey, A. 2003. Managing priority habitats for invertebrates, habitat section 9, coastal vegetated shingle. UK BAP Priority Habitats, Habitat section 9. Peterborough, Buglife The Invertebrate Conservation Trust.
Creer, J. & Green, H. (2014). Bae Cemlyn SAC. Field visit 19.03.2014 to assess Perennial vegetation of stony banks vegetation. NRW Internal Report
Dargie, T. C. D. (1995). Sand Dune Vegetation Survey of Great Britain. A national inventory. Part 3: Wales. Joint nature Conservation Committee. Peterborough.
Green, H. (2014a). Bae Cemlyn SAC. Field visit 23.04.2014 to assess Perennial vegetation of stony banks vegetation. NRW Internal Report.
Green, H. (2014b). Bae Cemlyn SAC. SAC monitoring data. NRW Internal Data.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.2.12 ES Volume B - Introduction to the environmental assessments B12 - Coastal processes and coastal geomorphology.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 5.2 Shadow Habitats Regulations Assessment Report.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.12 ES Volume D - WNDA Development D12 - Coastal processes and coastal geomorphology.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.80 ES Volume D - WNDA Development App D12-1 - Coastal Geomorphology Baseline for the Wylfa Newydd Project - 2014.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.81 ES Volume D - WNDA Development App D12-2 - Sediment Regime.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.82 ES Volume D - WNDA Development App D12-3 - Wylfa Newydd Main Site Wave Modelling Report.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.90 ES Volume D - WNDA Development App D13-8 - Marine Hydrodynamic Modelling Report - Wylfa Newydd Development Area.
Horizon Nuclear Power 2018. Wylfa Newydd Project, 6.4.96 ES Volume D - WNDA Development App D13-14 - Marine modelling of the construction discharge.
JNCC (2004). Common Standards Monitoring (CSM) for Vegetated Coastal

Shingle Habitats. Joint Nature Conservation Committee, Peterborough. http://jncc.defra.gov.uk/pdf/csm_coastal_shingle.pdf
Kay, L. (2018). Article 17 2018 GIS Layer Processing Notes: H1220 Perennial vegetation of stony banks. Internal NRW document.
Lewis, H. (2003). Bae Cemlyn SAC. Perennial vegetation of stony banks H1220. SAC Monitoring Report. CCW Internal Report.
NRW. (2018). Actions Database. NRW Internal Database.
Pybus, R. (2007). Bae Cemlyn SAC. Perennial vegetation of stony banks H1220. SAC Monitoring Report. CCW Internal Report.
Randall, R.E. & Doody, J.P. 2003. Guidance for the management of coastal vegetated shingle. Peterborough, English Nature (EN).
Rawlins, K. (2018). Bae Cemlyn SAC. Field visit to assess the condition of the Perennial vegetation of stony banks feature for informing A17 Reporting. NRW Internal Report.
Rodwell, J. S. (ed.) (2000). British Plant Communities. Volume 5. Maritime Communities and Vegetation of Open Habitats. Cambridge University Press.
Sneddon, P. & Randall, R.E. 1989. Vegetated shingle structures survey of Great Britain, bibliography. Research and Survey in Nature Conservation, 20. Nature Conservancy Council (NCC)
Sneddon, P. & Randall, R.E. 1993a. Coastal vegetated shingle structures of Great Britain, main report. Peterborough, Joint Nature Conservation Committee (JNCC).
Sneddon, P. & Randall, R.E. 1993b. Coastal vegetated shingle structures of Great Britain Appendix 1 - Shingle sites in Wales. Peterborough, Joint Nature Conservation Committee (JNCC).
N.Ireland
Data on aerial Nitrogen deposition taken from Air Pollution Information System website - http://www.apis.ac.uk/
Cooper, E.A., Crawford, I., Malloch, A.J.C. & Rodwell, J.S. (1992). Coastal vegetation survey of Northern Ireland. Lancaster, Lancaster University Environment and Heritage Service, Belfast. Northern Ireland Habitat Action Plan - Coastal Vegetated Shingle - March 2005
NIEA. Internal Condition Assessment Reports (various sites and years).
Rodwell, J.S. (2000). British Plant Communities. Volume 5, Maritime Communities and Vegetation of Open habitats. Cambridge: Cambridge University Press
Rodwell, J.S., Dring, J.C., Averis, A.B.V., Proctor, M.C.F., Malloch, A.J.C., Schaminee, J.H.J & Dargie, T.C.D. 1998. Review of Coverage of the National Vegetation Classification. Lancaster: Unit of Vegetation Science report to the Joint Nature Conservation Committee.
JNCC (1997). Coasts and seas of the United Kingdom, Region 17 Northern Ireland. Coastal Directories Series
Martin, J.R., Daly, O.H. and Devaney F.M. (2017) Survey and assessment of vegetated shingle and associated habitats at 30 coastal sites in Ireland. Irish Wildlife Manuals, No. 98. National Parks and Wildlife Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Ireland.

4. Range

4.1 Surface area (in km²)	32105.21
4.2 Short-term trend Period	2007-2018
4.3 Short-term trend Direction	Stable (0)
4.4 Short-term trend Magnitude	a) Minimum b) Maximum
4.5 Short-term trend Method used	Based mainly on extrapolation from a limited amount of data

4.6 Long-term trend Period		
4.7 Long-term trend Direction		
4.8 Long-term trend Magnitude	a) Minimum	b) Maximum
4.9 Long-term trend Method used		
4.10 Favourable reference range	a) Area (km²)	32105.21
	b) Operator	
	c) Unknown	No
	d) Method	The FRR is approximately equal to the current range area. The FRR value has been updated to take account of improved information on the habitat range. The approach taken to set the FRR is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563).
4.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method	
	The change is mainly due to:	Improved knowledge/more accurate data
4.12 Additional information		

5. Area covered by habitat

5.1 Year or period	1989-2018			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	51.5096
5.3 Type of estimate	Best estimate			
5.4 Surface area Method used	Based mainly on extrapolation from a limited amount of data			
5.5 Short-term trend Period	2007-2018			
5.6 Short-term trend Direction	Uncertain (u)			
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval	
5.8 Short-term trend Method used	Insufficient or no data available			
5.9 Long-term trend Period				
5.10 Long-term trend Direction				
5.11 Long-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval	
5.12 Long-term trend Method used				
5.13 Favourable reference area	a) Area (km²)	56.66056		
	b) Operator			
	c) Unknown	No		
	d) Method	The FRA is not more than 10% above the current area. The FRA value has been updated to take account of improved information on the habitat area. The approach taken to set the FRA is explained in the 2007 and 2013 UK Article 17 habitat reports (see http://jncc.defra.gov.uk/page-4064 and http://jncc.defra.gov.uk/page-6563).		
5.14 Change and reason for change in surface area of range	Improved knowledge/more accurate data Use of different method			
	The change is mainly due to:	Improved knowledge/more accurate data		

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

5.15 Additional information

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km^2)	Minimum	15.626	Maximum	16.156
	b) Area in not-good condition (km^2)	Minimum	13.09	Maximum	13.71
	c) Area where condition is not known (km^2)	Minimum	22.163	Maximum	22.273
6.2 Condition of habitat Method used	Based mainly on extrapolation from a limited amount of data				
6.3 Short-term trend of habitat area in good condition Period	2001-2018				
6.4 Short-term trend of habitat area in good condition Direction	Stable (0)				
6.5 Short-term trend of habitat area in good condition Method used	Based mainly on expert opinion with very limited data				
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period?		No		
6.7 Typical species Method used					
6.8 Additional information					

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Abstraction of surface and ground water for resource extraction (C14)	M
Mining and extraction activities not referred to above (C15)	M
Development and operation of energy production plants (including bioenergy plants, fossil and nuclear energy plants) (D05)	M
Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08)	H
Modification of flooding regimes, flood protection for residential or recreational development (F28)	M
Sea-level and wave exposure changes due to climate change (N04)	H

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Abstraction of surface and ground water for resource extraction (C14)	H
Mining and extraction activities not referred to above (C15)	H

Development and operation of energy production plants (including bioenergy plants, fossil and nuclear energy plants) (D05)	H
Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08)	H
Modification of flooding regimes, flood protection for residential or recreational development (F28)	M
Sea-level and wave exposure changes due to climate change (N04)	H

7.2 Sources of information

7.3 Additional information

8. Conservation measures

8.1 Status of measures	a) Are measures needed?	Yes
	b) Indicate the status of measures	Measures identified and taken
8.2 Main purpose of the measures taken		Restore the habitat of the species (related to 'Habitat for the species')
8.3 Location of the measures taken		Both inside and outside Natura 2000
8.4 Response to the measures		Medium-term results (within the next two reporting periods, 2019-2030)

8.5 List of main conservation measures

Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land (CA01)
Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Manage changes in hydrological and coastal systems and regimes for construction and development (CF10)
Reduce impact of military installations and activities (CH01)
Management, control or eradication of other invasive alien species (CI03)
Implement climate change adaptation measures (CN02)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters	a) Range	Good
	b) Area	Poor
	c) Structure and functions	Bad
9.2 Additional information		Future trend of Range is Overall stable; Future trend of Area is Negative - decreasing <=1% (one percent or less) per year on average; and Future trend of Structure and functions is Negative - slight/moderate deterioration

10. Conclusions

10.1. Range	Favourable (FV)
10.2. Area	Unfavourable - Inadequate (U1)

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

10.3. Specific structure and functions (incl. typical species)	Unfavourable - Bad (U2)
10.4. Future prospects	Unfavourable - Bad (U2)
10.5 Overall assessment of Conservation Status	Unfavourable - Bad (U2)
10.6 Overall trend in Conservation Status	Stable (=)
10.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status No change The change is mainly due to: b) Overall trend in conservation status Genuine change Use of different method The change is mainly due to: Genuine change
10.8 Additional information	Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is stable; and (ii) the current Range surface area is approximately equal to the Favourable Reference Range. Conclusion on Area covered by habitat reached because: (i) the short-term trend direction in Area is uncertain; and (ii) the current Area is not more than 10% below the Favourable Reference Area. Conclusion on Structure and functions reached because habitat condition data indicates that more than 25% of the habitat is in unfavourable (not good) condition. Conclusion on Future prospects reached because: (i) the Future prospects for Range are good; (ii) the Future prospects for Area covered by habitat are poor; and (iii) the Future prospects for Structure and functions are bad. Overall assessment of Conservation Status is Unfavourable-bad because one or more of the conclusions is Unfavourable-bad. Overall trend in Conservation Status is based on the combination of the short-term trends for Range - stable, Area covered by habitat - uncertain, and Structure and functions - stable. If negative future trends for Area and Structure and functions are also taken into account, the Overall trend would be deteriorating. The Overall trend in Conservation Status has changed between 2013 and 2019 because the Structure and functions trend has changed from increasing to stable, and because of the removal of the Future prospects trend from the 2019 method used to assess Overall trend.

11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km² in biogeographical/ marine region)	a) Minimum b) Maximum c) Best single value 35.1
11.2 Type of estimate	Best estimate
11.3 Surface area of the habitat type inside the network Method used	Based mainly on extrapolation from a limited amount of data
11.4 Short-term trend of habitat area in good condition within the network Direction	Stable (0)

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

11.5 Short-term trend of habitat area in good condition within network Method used	Based mainly on extrapolation from a limited amount of data
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

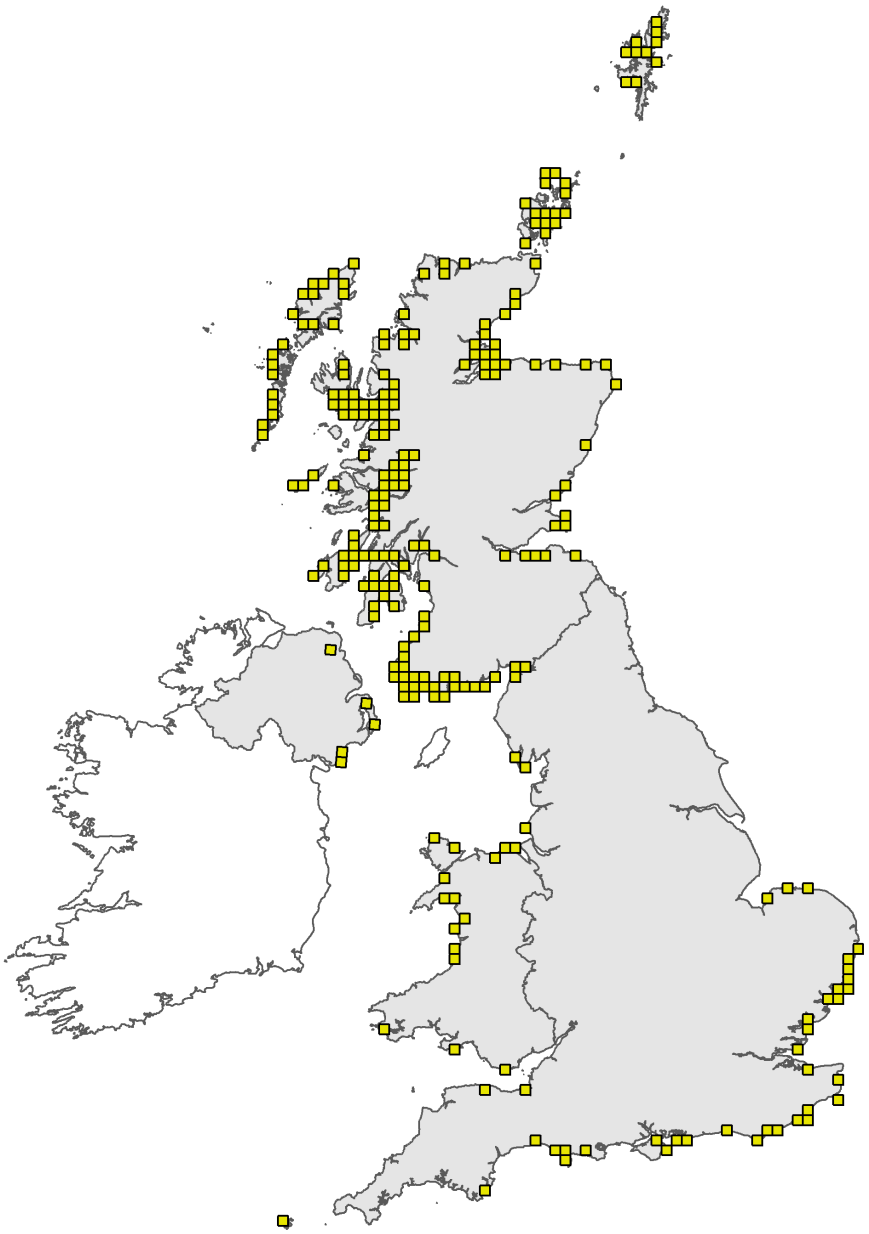

Figure 1: UK distribution map for H1220 - Perennial vegetation of stony banks. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The 10km grid square distribution map is based on available habitat records which are considered to be representative of the distribution within the current reporting period. For further details see the 2019 Article17 UK Approach document.

Range Map

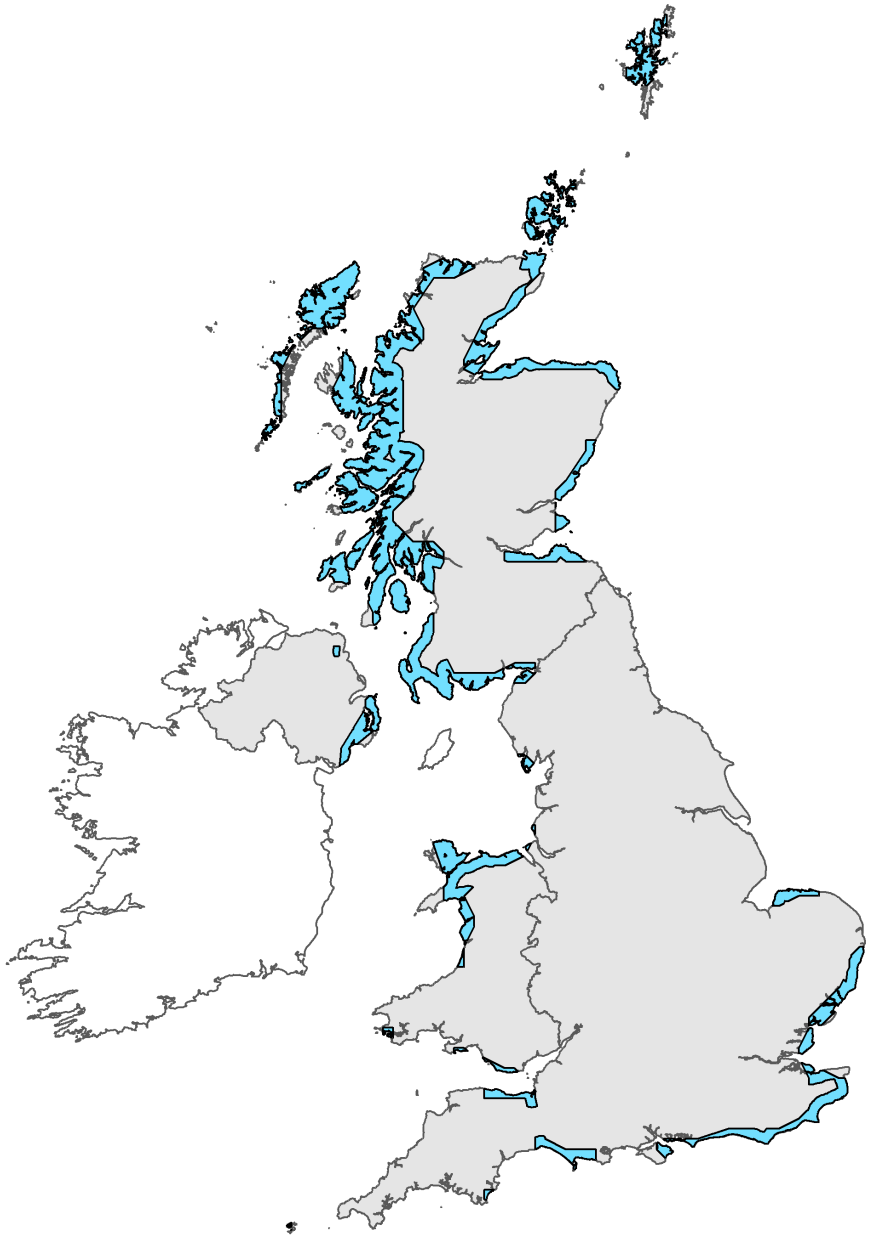

Figure 2: UK range map for H1220 - Perennial vegetation of stony banks. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

The range map has been produced by applying a bespoke range mapping tool for Article 17 reporting (produced by JNCC) to the 10km grid square distribution map presented in Figure 1. The alpha value for this habitat was 25km. For further details see the 2019 Article 17 UK Approach document.