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:

H1210 - Annual vegetation of drift lines

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	**1210 - Annual vegetation of drift lines**

2. Maps

2.1 Year or period	1989-2018
2.3 Distribution map	Yes
2.3 Distribution map Method used	Complete survey or a statistically robust estimate
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 Barne, J.H. C.F. Robson, S.S. Kaznowska, J.P. Doody & N.C. Davidson, (1996), Region 10. South-west England: Seaton to the Roseland Peninsula, pages 40-41. Barne, J.H. et al, (1996), Region 11. The Western Approaches: Falmouth Bay to Kenfig, Pages 49-51 Barne, J.H. et al, (1995), Region 13. Northern Irish Sea: Colwyn Bay to Stranraer, including the Isle of Man, Pages 53-56 Barne, J.H. et al, (1995), Region 6. Eastern England: Flamborough Head to Great Yarmouth, pages 48-50 Barne, J.H. et al, (1998), Region 7. South-east England: Lowestoft to Dungeness, pages 48-52 Barne, J.H. et al, (1998), Region 8. Sussex: Rye Bay to Chichester Harbour, pages 41-43 Barne, J.H. et al, (1996), Region 9. Southern England: Hayling Island to Lyme Regis,pages 45-48 Barne, J.H. et al, (1995), Region 5. North-east England: Berwick-upon-Tweed to Filey Bay, pages 42-45 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 Natural England. 2015. Coastal management theme plan (IPENSTP019) http://publications.naturalengland.org.uk/publication/6371629661683712?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 Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: The Wash and North Norfolk Coast SIP245 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
Natural England. 2014. Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: Dungeness 068,
Natural England. 2014. Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: Chesil Beach and The Fleet SIP041, 2014
Natural England. 2014. Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: Alde-Ore Estuaries SIP 002;
Natural England. 2014. Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: Solent SIP 043;
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http://publications.naturalengland.org.uk/publication/6371629661683712?category=5605910663659520
Janssen, J.A.M.. Rodwell, J.S Garcia M Criado, S. Gubbay, S. Haynes, T, A. Nieto, A., Sanders, N Landucci,F . Loidi,J Ssymank,A. Tahvanainen, T. Valderrabano,M Acosta, A Aronsson, M. Arts,G Attorre, F. Bergmeier, E Bijlsma, R-J. Bioret,F. Bita-Nicolae, C. Biurrun, I. Calix, M. Capelo, J. Carni,A Chytry, M. Dengler, J. Dimopoulos, P. Essl, F. Gardfjell, H. Gigante,D Giusso del Galdo, G. Hajek, M. Jansen, F. Jansen, J. Kapfer, J. Mickolajczak, A Molina, J A. Molnar,Z. Paternoster, D. Piernik, A. Poulin, B. Renaux, B Schaminee,JHJ. Sumberova, K Toivonen, H. Tonteri, T. Tsiripidis, I. Tzonev R and Valachovic, M. 2016 European Red List of Habitats: Part 2 Terrestrial & Freshwater Habitats. European Commission, DG Environment
http://ec.europa.eu/environment/nature/knowledge/pdf/terrestrial_EU_red_list_report.pdf
Jones L, Garbutt A and Angus S. 2013. Impacts of climate change on coastal habitats, MCCIP Science Review, 4
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http://publications.naturalengland.org.uk/publication/6621454219083776?category=5605910663659520
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Barne, J.H. et al.1996. Region 9. Southern England: Hayling Island to Lyme Regis,pages 45-48
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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.
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
https://www.environment.gov.scot/our-environment/habitats-and-species/habitat-map-of-scotland/
Also
http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H1210_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.
Dargie, T. C. D. (1995). Sand Dune Vegetation Survey of Great Britain. A national inventory. Part 3: Wales. Joint nature Conservation Committee. Peterborough.
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http://jncc.defra.gov.uk/pdf/CSM_coastal_sand_dune.pdf
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Kay, L. (2018). Article 17 2018 GIS Layer Processing Notes: H1210 Annual vegetation of drift lines. Internal NRW document.
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Randall, R.E. & Doody, J.P. (2003). Guidance for the management of coastal vegetated shingle. Peterborough, English Nature.
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Sneddon, P. & Randall, R.E. (1993). 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
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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)	29353.35	
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)	
	b) Operator	More than (>)
	c) Unknown	No
	d) Method	The FRR is no more than 10% above the current range area. An FRR operator has been used as it is not clear what the exact area of the FRR is. 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		

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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 3.112
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)		
	b) Operator	More than (>)	
	c) Unknown	No	
	d) Method	The FRA is not more than 10% above the current area. An FRA operator has been used as it is not clear what the exact area of the FRA is. 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	
5.15 Additional information			

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0.74	Maximum 0.79
	b) Area in not-good condition (km²)	Minimum 0.52	Maximum 0.57
	c) Area where condition is not known (km²)	Minimum 1.802	Maximum 1.802
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	Uncertain (u)		
6.5 Short-term trend of habitat area in good condition Method used	Insufficient or no data available		
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period?	No	

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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
Sports, tourism and leisure activities (F07)	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)	M
Deposition and treatment of waste/garbage from household/recreational facilities (F09)	M
Other invasive alien species (other then species of Union concern) (I02)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	M
Sports, tourism and leisure activities (F07)	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)	M
Deposition and treatment of waste/garbage from household/recreational facilities (F09)	M
Other invasive alien species (other then species of Union concern) (I02)	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)	

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8.5 List of main conservation measures

Adapt mowing, grazing and other equivalent agricultural activities (CA05)
Habitat restoration/creation from resources, exploitation areas or areas damaged due to installation of renewable energy infrastructure (CC07)
Habitat restoration of areas impacted by residential, commercial, industrial and recreational infrastructure, operations and activities (CF02)
Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Manage changes in hydrological and coastal systems and regimes for construction and development (CF10)
Management of hunting, recreational fishing and recreational or commercial harvesting or collection of plants (CG02)
Reduce impact of military installations and activities (CH01)
Management, control or eradication of other invasive alien species (CI03)
Management of problematic native species (CI05)
Implement climate change adaptation measures (CN02)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters	a) Range	Poor
	b) Area	Unknown
	c) Structure and functions	Bad
9.2 Additional information	Future trend of Range is Overall stable; Future trend of Area is Unknown; and Future trend of Structure and functions is Negative - slight/moderate deterioration	

10. Conclusions

10.1. Range	Unfavourable - Inadequate (U1)
10.2. Area	Unfavourable - Inadequate (U1)
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	Unknown (x)
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 No information on nature of change The change is mainly due to:
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 not more than 10% below the Favourable Reference Range.

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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 poor; (ii) the Future prospects for Area covered by habitat are unknown; 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 - uncertain.
The Overall trend in Conservation Status has changed between 2013 and 2019 because the Area trend has changed from decreasing to uncertain, and the Structure and functions trend has changed from increasing to uncertain [note that the reason for change is due to less information/accuracy or certainty in the information available].

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 1.2697
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)
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

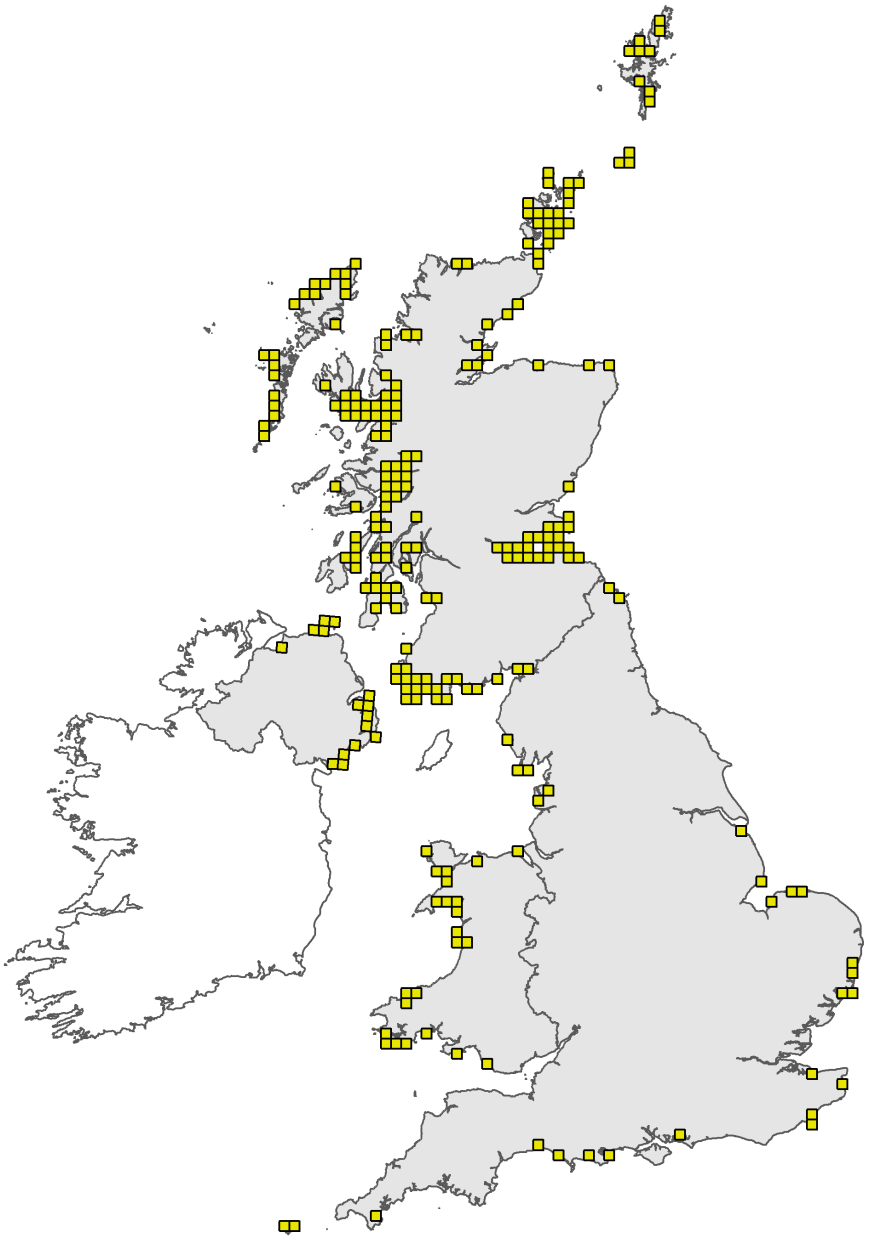

Figure 1: UK distribution map for H1210 - Annual vegetation of drift lines. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

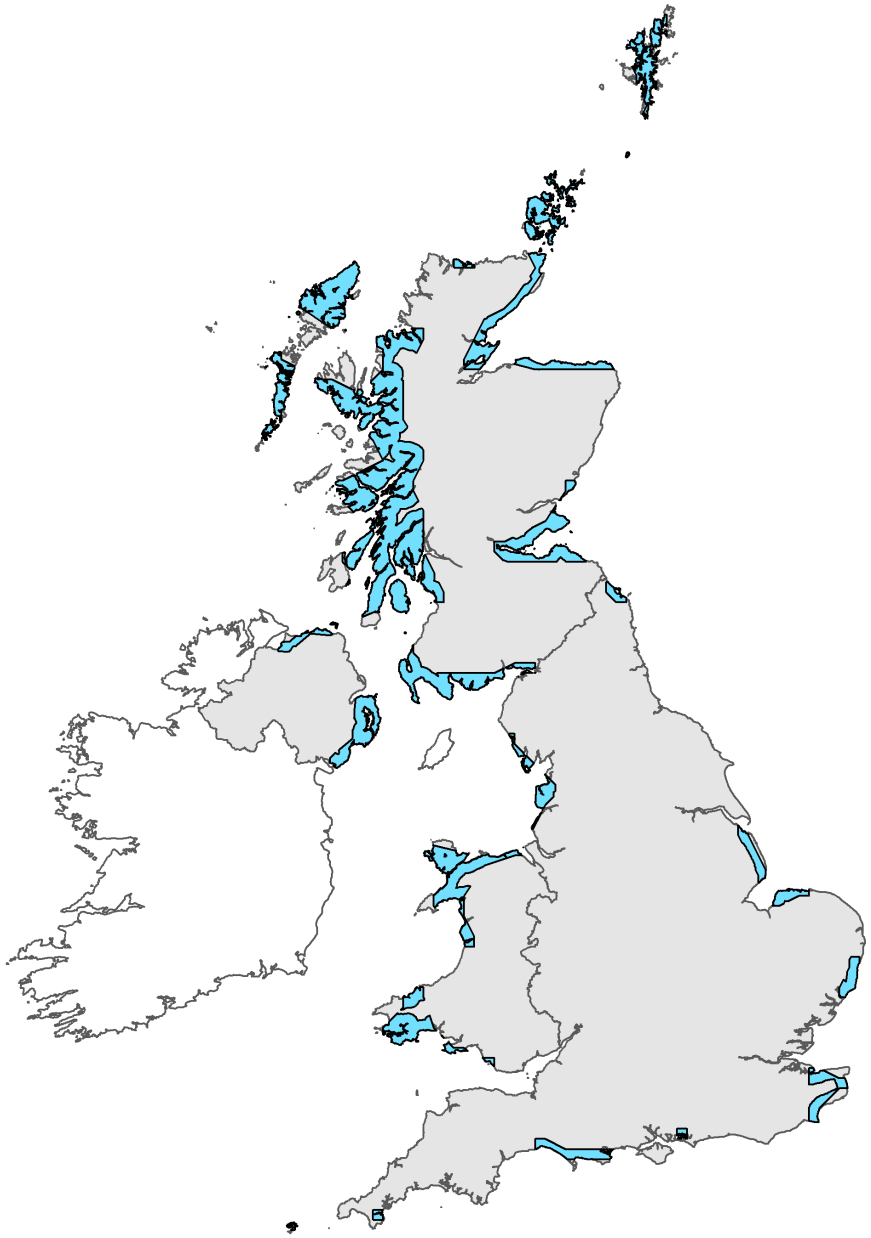

Figure 2: UK range map for H1210 - Annual vegetation of drift lines. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.