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

Supporting documentation for the conservation status assessment for the habitat:

H1210 - Annual vegetation of drift lines

ENGLAND

IMPORTANT NOTE - PLEASE READ

- The information in this document is a country-level contribution to 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.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this habitat is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was only relevant at UK-level (sections 10 Future prospects and 11 Conclusions).
- For technical reasons, the country-level future trends for Range, Area covered by habitat and Structure and functions are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-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.

NATIONAL LEVEL

1. General information

1.1 Member State	UK (England information only)
1.2 Habitat code	1210 - Annual vegetation of drift lines

2. Maps

2.1 Year or period	2013-
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

3.2 Sources of information

Atlantic (ATL)

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 thomaplan: A str

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;

Natural England. 2014. Improvement Programme for England's Natura 2000 Sites (IPENS) Site Improvement Plan: Portland-Studland & St Albans-Durlston SIP 178;

Natural England 2015. Coastal management theme plan (IPENSTP019) http://publications.naturalengland.org.uk/publication/6371629661683712?categ ory=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

http://www.mccip.org.uk/media/13315/2013arc_backingpapers_18_chab.pdf Natural England. 2015.Climate change theme plan: Developing a strategic approach to climate change adaptation (IPENSTP014)

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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?categ ory=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

Natural England. 2015. Improvement Programme for England's Natura 2000 sites (IPENS): Planning for the future Programme Report - a summary of the programme findings. (NE601). Natural England.

http://publications.naturalengland.org.uk/publication/5757712073752576?categ ory=4878851540779008

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

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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

JNCC. 2013. Third report by the United Kingdom under article 17 on the implementation of the directive from January 2007 to December 2012 H1210 Annual vegetation of drift lines

4. Range

- 4.1 Surface area (in km²)
- 4.2 Short-term trend Period
- 4.3 Short-term trend Direction
- 4.4 Short-term trend Magnitude
- 4.5 Short-term trend Method used
- 4.6 Long-term trend Period
- 4.7 Long-term trend Direction
- 4.8 Long-term trend Magnitude
- 4.9 Long-term trend Method used
- 4.10 Favourable reference range
- 4.11 Change and reason for change in surface area of range

Uncertain (u)

a) Minimum

b) Maximum

- a) Minimum
- b) Maximum
- a) Area (km²)
- b) Operator
- c) Unknown No
- d) Method

No change

The change is mainly due to:

4.12 Additional information

5. Area covered by habitat

5.1 Year or period

2013-2018

5.2 Surface area (in km²)

a) Minimum

b) Maximum

c) Best single 1

value

5.3 Type of estimate

5.4 Surface area Method used

5.5 Short-term trend Period

5.6 Short-term trend Direction

5.7 Short-term trend Magnitude

Best estimate

Based mainly on extrapolation from a limited amount of data

2007-2018

Uncertain (u)

a) Minimum

b) Maximum

c) Confidence

interval

5.8 Short-term trend Method used

5.9 Long-term trend Period

5.10 Long-term trend Direction

Insufficient or no data available

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) Operatorc) Unknownd) Method	No	
5.14 Change and reason for change in surface area of range	No change The change is i	mainly due to:	

5.15 Additional information

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0.4	Maximum 0.45
	b) Area in not-good condition (km²)	Minimum 0.5	Maximum 0.55
	c) Area where condition is not known (km²)	Minimum 0.05	Maximum 0.05
6.2 Condition of habitat Method used	Based mainly on extrapolati	on from a limited amount o	of data
6.3 Short-term trend of habitat area in good condition Period	2007-2018		
6.4 Short-term trend of habitat area in good condition Direction	Uncertain (u)		
6.5 Short-term trend of habitat area	Insufficient or no data availa	able	
in good condition Method used	Has the list of typical specie	s changed in comparison to	the previous No
6.6 Typical species	reporting period?		INO
6.7 Typical species Method used			
6.8 Additional information			

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Sports, tourism and leisure activities (F07)	Н
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)	Н
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	M
Development and operation of energy production plants (including bioenergy plants, fossil and nuclear energy plants) (D05)	M
Harvesting or collecting of other wild plants and animals (excluding hunting and leisure fishing) (G09)	M

Threat	Ranking
Sports, tourism and leisure activities (F07)	Н
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)	Н
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	Н
Development and operation of energy production plants (including bioenergy plants, fossil and nuclear energy plants) (D05)	M
Harvesting or collecting of other wild plants and animals (excluding hunting and leisure fishing) (G09)	M
Sea-level and wave exposure changes due to climate change (N04)	M

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 (re	elated 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 nex	kt two reporting periods, 2019-2030)
8.5 List of main conservation measures		

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 of hunting, recreational fishing and recreational or commercial harvesting or collection of plants (CG02)

Habitat restoration/creation from resources, exploitation areas or areas damaged due to installation of renewable energy infrastructure (CC07)

Implement climate change adaptation measures (CN02)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters

a) Range

b) Area

c) Structure and functions

9.2 Additional information

The two most important anthropogenic factors for this habitat are trampling

from recreational activities, which damages the annual flora, and flood risk management directly altering the form of shingle banks or indirectly from preventing longshore drift of sediment essential for maintaining structure and function. Whilst measures to manage these are in place on some sites, increased access provision and sea level changes could mean that the measures may become inadequate in future.

10. Conclusions

10.1. Range

10.2. Area

10.3. Specific structure and functions

(incl. typical species)

10.4. Future prospects

10.5 Overall assessment of

Conservation Status

10.6 Overall trend in Conservation

Status

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 change

The change is mainly due to:

10.8 Additional information

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)

11.2 Type of estimate

11.3 Surface area of the habitat type inside the network Method used

11.4 Short-term trend of habitat area in good condition within the network Direction

11.5 Short-term trend of habitat area in good condition within network Method used

11.6 Additional information

- a) Minimum
- b) Maximum
- c) Best single value 0.97

Best estimate

Based mainly on extrapolation from a limited amount of data

Stable (0)

Based mainly on extrapolation from a limited amount of data

Area used is taken from JNCC SAC data, derived from Standard Data Forms.

12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

Distribution Map

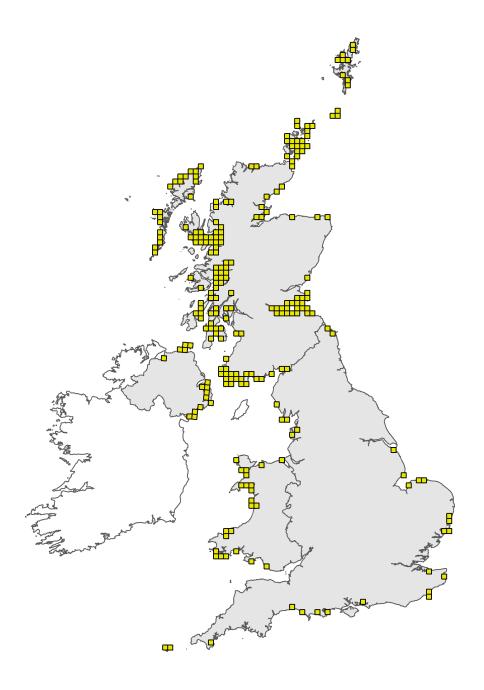


Figure 1: UK distribution map for H1210 - Annual vegetation of drift lines. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

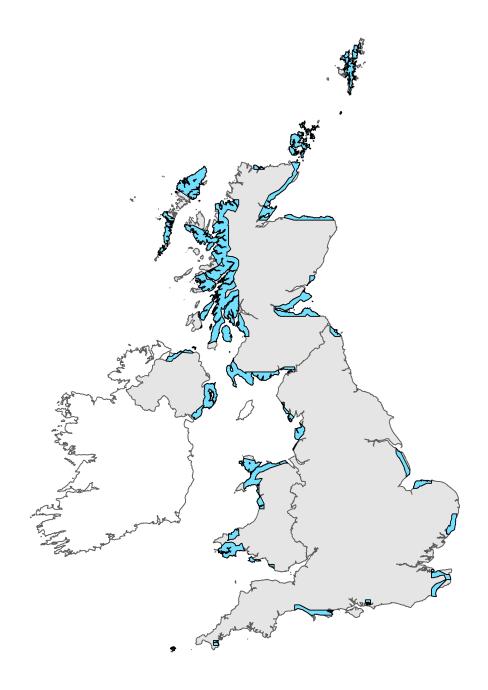


Figure 2: UK range map for H1210 - Annual vegetation of drift lines. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.

Explanatory Notes

Habitat code: 1210	
Field label	Note
2.3 Distribution map; Method used	Map derived from data provided by JNCC Terrestrial Habitat 10-km Square Distribution Map Data and Sources. No new locations have been recorded since 2013.
Habitat code: 1210 Region cod	de: ATL
Field label	Note
3.2 Sources of information	Key sources of information on Annex I habitats in relation to site issues, pressures and threats and approaches to management measures include the material collated for the IPENS programme. Key published SIPS, evidence projects and Theme Plans are referenced which provide a range of information relevant to this Annex I habitat and other habitats and species within Natura 2000 sites. Only new sources are included - for previous reports see the 2nd and 3rd Article 17 reports and audit trails.
4.3 Short term trend; Direction	The range in England is heavily fragmented, and the habitat appears to be spread thinly along the coast. The degree of change is not quantifiable due to the ephemeral nature of the habitat.
5.2 Surface area	Surface area estimates relate to maximum potential area - however the habitat is ephemeral so locations may vary from year to year. Locations which have suitable substrate but which have been recently affected by beach management for flood defence are included here, even if habitat has not been recently present - for example Dungeness which has a 10km length of foreshore repeatedly artifically profiled due to recent storm events affecting the whole frontage
5.4 Surface area; Method used	JNCC coastal directories provide 1990s area of shingle structures and length of shingle foreshore by region. Although older data, it is not expected that these would have changed much so are still considered relevant and are the only source of consistent national information about this habitat type
5.4 Surface area; Method used	Estimated area by using length of 308kms shingle foreshore (derived from Priority Habitat Mapping/JNCC Coastal Directories (Barnes et al 1995-1998 http://jncc.defra.gov.uk/default.aspx?page=2157) multiplied by arbitrary width of habitat of 3 m based on measurements from example sites. Area of 1km2 is likely to be a mximum potential extent but may not be present on every site every year
6.2 Condition of habitat; Method used	SSSI units with H1210 often occur in combination with other habitats. Information on condition was derived from unit condition on CSMi, cross-checked against reporting notes for most of the units and extrapolated figures are shown. Asssesments have been done at various times with only a limited number in the 2013-2018 reporting period. The data is not based on systematic recent surveys, hence a range is given
6.4 Short term trend of habitat area in good condition; Direction	This is uncertain because condition at key sites has been assessed at different times, so a national trend cannot be derived from available information. In addition, the condition can vary within and between sites in relatively short space of time if damaging activities such as beach profiling are carried out.
7.2 Sources of information	Pressures and threats information is largely derived from a range of information produced by the IPENS programme, including SIPs, Theme Plans and the overall programme report which are available at http://publications.naturalengland.org.uk/category/4878851540779008 or other sources listed in the 'habitat sources' tab, or expert knowledge

7.3 Additional information	Along with a number of other habitats, shingle foreshores are being used more for gathering of wild food plant species, often gathering in commercial quantities rather than small occasional amounts for personal use, thus justifying adding G09 to the threats. Increased illegal targeting of these areas by third parties are hard to control, with more people accessing the coast this is seen as a threat that requires increased awareness and education. There are existing nuclear power stations situated on or near shingle coastlines in England, hence the inclusion of D05 as a threat, this includes future decommissioning as well as maintenance and expansion
8.2 Main purpose of the measures taken	The presence of the habitat is totally reliant on the natural processes that shape the beach. The maintenance of natural geomorphological structures and function and annual production of adequate seed are critical if the habitat is to be regularly renewed. As many locations are also important for flood risk management, there is an ongoing need to ensure that measures are taken on a long-term basis. such activities are current pressures and long-term threats in some key locations
11.4 Short term trend of habitat area in good condition within the network; Direction	A higher area of habitat in the network has been assessed as 'recovering' compared to the area assessed as 'not assesed', if recovery continues there is an expectation of improvement in the habitat. in the absence of further information this has been determined to be at least 'stable'
11.4 Short term trend of habitat area in good condition within the network; Direction	Due to the variation in dates of assessments at site level, the English trend within protected sites cannot be accurately determined. Therefore this is given as 'uncertain'.