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:

H2120 - Shifting dunes along the shoreline with Ammophila arenaria (`white dunes`)

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 offshorelevel 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.

NATIONAL LEVEL

1. General information

1.1 Member State	UK
1.2 Habitat code	2120 - Shifting dunes along the shoreline with Ammonhila arenaria ("white d

2. Maps

2.1 Year or period	1987-2018
2.3 Distribution map	Yes

2.3 Distribution map Method used Complete survey or a statistically robust estimate

2.4 Additional maps

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs

3.2 Sources of information

Atlantic (ATL)

England

JNCC (14/11/2017) Spreadsheet of UK SAC information as contained within the Natura 2000 standard data forms submitted to the European Union.

http://jncc.defra.gov.uk/page-1461

Brownett, JM., Mills, RS,. (2017) The development and application of remote sensing to monitor sand dune habitats. Journal of Coastal Conservation, Volume 21, Number 5, page 643-656. https://link.springer.com/article/10.1007/s11852-017-0504-x

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Natural England. 2015. Coastal management theme plan (IPENSTP019) http://publications.naturalengland.org.uk/publication/6371629661683712?categ ory=5605910663659520

Natural England. 2015. Climate change theme plan: Developing a strategic approach to climate change adaptation (IPENSTP014)

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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)

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http://www.mccip.org.uk/media/13315/2013arc_backingpapers_18_chab.pdf Natural England. 2015. Diffuse water pollution theme plan: Developing a strategic approach to diffuse water pollution for England's Natura 2000 sites (IPENSTP015)

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Natural England. 2015. Grazing Theme Plan: Developing a strategic approach for England's Natura 2000 sites. (IPENSTP016)

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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.

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Hansom J.D., Rennie A.F., Dunlop A. & Drummond J. (2011). A methodology to assess the causes and rates of change to Scotland's beaches and sand dunes Phase 1. Scotlish Natural Heritage Commissioned Report No. 364.

Adaptation Sub Committee 2013. Managing the land in a changing climate-Adaptation Sub-Committee progress report 2013. Chapter 5 Regulating services Coastal Habitats. ASC http://www.theccc.org.uk/wp-

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http://ec.europa.eu/environment/nature/natura2000/platform/events/263_sec ond_atlantic_natura_2000_seminar_en.htm Includes the 'Dune Road Map' from the LIFE Platform meeting 2016 by Houston J.

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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

33057.86 2007-2018 Stable (0)

a) Minimum b) Maximum

Based mainly on extrapolation from a limited amount of data

a) Area (km²) 33057.86

b) Operator

a) Minimum

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

b) Maximum

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	1987-2018		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single 27.3681 value
5.3 Type of estimate	Best estimate		
5.4 Surface area Method used	Based mainly o	n extrapolation from a limited am	ount of data
5.5 Short-term trend Period	2007-2018		
5.6 Short-term trend Direction	Decreasing (-)		
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval
5.8 Short-term trend Method used	Based mainly o	n extrapolation from a limited am	ount of data
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% a operator has been used as it is rethe FRA is. The approach taken to 2007 and 2013 UK Article 17 hall http://jncc.defra.gov.uk/page-4 http://jncc.defra.gov.uk/page-6	not clear what the exact area of to set the FRA is explained in the bitat reports (see 064 and
5.14 Change and reason for change	•	vledge/more accurate data	
in surface area of range	Use of differen		
	The change is r	nainly due to: Improved knowl	edge/more accurate data
5.15 Additional information		trend direction is considered to bate of decline identified in Scotland	

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 11.13	78 Maximum 13.9178
	b) Area in not-good condition (km²)	Minimum 6.039	1 Maximum 7.4591
	c) Area where condition is not known (km²)	Minimum 7.191	2 Maximum 8.9912
6.2 Condition of habitat Method used	Complete survey or a statist	ically robust estim	ate
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 6.5 Short-term trend of habitat area Decreasing (-)

in good condition Method used 6.6 Typical species

Based mainly on expert opinion with very limited data

6.7 Typical species Method used 6.8 Additional information

Has the list of typical species changed in comparison to the previous reporting period?

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	Н
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
Other invasive alien species (other then species of Union concern) (I02)	Н
Problematic native species (I04)	M
Mixed source air pollution, air-borne pollutants (J03)	Н
Abiotic natural processes (e.g. erosion, silting up, drying out, submersion, salinization) (LO1)	M
Sea-level and wave exposure changes due to climate change (NO4)	M
Threat	Ranking
Threat Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	Ranking M
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning	
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06)	M
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06) Sports, tourism and leisure activities (F07) 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)	M H
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06) Sports, tourism and leisure activities (F07) 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) Other invasive alien species (other then species of Union	M H H
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06) Sports, tourism and leisure activities (F07) 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) Other invasive alien species (other then species of Union concern) (I02)	М Н Н
Development and maintenance of beach areas for tourism and recreation incl. beach nourishment and beach cleaning (F06) Sports, tourism and leisure activities (F07) 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) Other invasive alien species (other then species of Union concern) (I02) Problematic native species (I04)	М Н Н

7.2 Sources of information

7.3 Additional information

JO3: Mixed source air pollution, air-borne pollutants is ranked as a High ranked pressure and threat, due to the nutrient N critical load for the habitat being exceeded across >25% of the habitat area

8. Conservation measures

8.5 List of main 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)	
taken 8.3 Location of the measures taken	Both inside and outside Natura 2000	

Adapt mowing, grazing and other equivalent agricultural activities (CA05)

Manage/reduce/eliminate diffuse pollution to surface or ground waters from resource exploitation and energy production (CC09)

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, control or eradication of other invasive alien species (CIO3)

Management of problematic native species (CI05)

Implement climate change adaptation measures (CN02)

Improvement of habitat of species from the directives (CS03)

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	decreasing <=1% (one pero Structure and functions is The Future prospects for S 25% of the habitat area is	verall stable; Future trend of Area is Negative - cent or less) per year on average; and Future trend of Negative - slight/moderate deterioration. tructure and functions takes into account that at least expected to be in unfavourable (not good) condition in ritical load exceedance, unless measures are taken to

reduce N deposition impacts.

10. Conclusions

10.1. Range	Favourable (FV)
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

10.6 Overall trend in Conservation Status

10.7 Change and reasons for change in conservation status and conservation status trend

Unfavourable - Bad (U2)

Deteriorating (-)

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

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 decreasing by 1% per year or less; 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 - decreasing, and Structure and functions - decreasing.

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 9.8401

Best estimate

Complete survey or a statistically robust estimate

Decreasing (-)

Based mainly on extrapolation from a limited amount of data

12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

Distribution Map

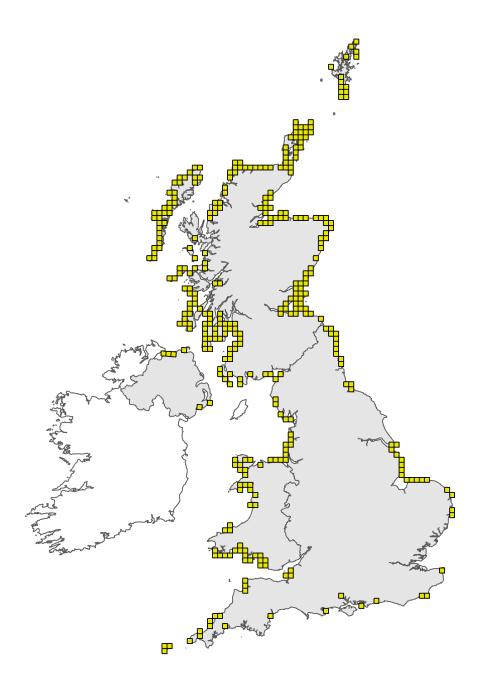


Figure 1: UK distribution map for H2120 - Shifting dunes along the shoreline with *Ammophila arenaria* ('white dunes'). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 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

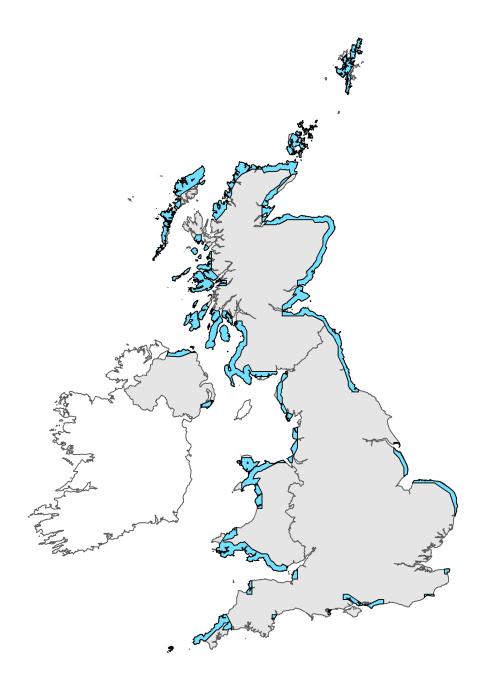


Figure 2: UK range map for H2120 - Shifting dunes along the shoreline with *Ammophila arenaria* (`white dunes`). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil 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.