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:

H7120 - Degraded raised bogs still capable of natural regeneration

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.

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NATIONAL LEVEL

1. General information

1.1 Member State	**UK**
1.2 Habitat code	**7120 - Degraded raised bogs still capable of natural regeneration**

2. Maps

2.1 Year or period	1979-2018
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 Natural England (2015) Hydrological Functioning IPENS SIPs Diack (2016) Review of SSSI series for Raised Bogs. Unpublished Natural England report Lindsay & Immirzi (1996) Lowland Raised Bog Inventory Scotland References within: http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H7120_SCOTLAND.pdf Wales Blackstock, T.H., Howe, E.A., Stevens, J.P., Burrows, C.R. & Jones, P.S. (2010). Habitats of Wales: a comprehensive field survey, 1979-1997. University of Wales Press, Cardiff. 229 pp. European Commission DG Environment (2013). Interpretation Manual of European Union Habitats. EUR28. Guest, D. (2012). Assessing N deposition as a pressure for Article 17 reporting on habitats. CCW HQ internal document. JNCC (2018). Nitrogen exceedance of Annex I habitats in SACs. Excel spreadsheet provided 29 May 2018. Jones, P.S., Birch, K.S. & Kay, L. (2018a). Art17_2018_H7120_Degraded_raised_bogs_ArcGIS database, Natural Resources Wales. Jones, P.S. (2018a). H7120_S6 Structure and functions, Excel s/s. Natural Resources Wales. Jones, P.S. (201b). Towards a National Action Plan for Welsh Peatlands. Written advice to Welsh Government, May 2018. Natural Resources Wales, Bangor. Jones, P.S., Bosanquet, S.D.S., Reed, D.K., Birch, K.S., Stevens, J. & Turner, A.J. (2011). The habitat composition and conservation of Welsh lowland mires: preliminary results from the Lowland Peatland Survey of Wales. In: Proceedings of a Memorial Conference for Dr David Paul Stevens 1958-2007: Grassland Ecologist and Conservationist. Eds: Blackstock, T.H., Howe, E.A., Rothwell, J.P., Duigan, C.A & Jones, P.S. pp. 103-115. CCW Staff Science Report 10/03/05, Countryside Council for Wales, Bangor. Jones, P.S., Stevens, J., Bosanquet, S.D.S., Turner, A.J., Birch, K.S. & Reed, D.K.

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4. Range

4.1 Surface area (in km²)	64262.48	
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	Less than (<)
	c) Unknown	No
	d) Method	The FRR is much less than 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

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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 The change is mainly due to: Improved knowledge/more accurate data
4.12 Additional information	Note that the aim is to restore this habitat back to H7110 Active raised bog, which means that the Favourable Reference Range is much less than the current range and the range area should be decreasing.

5. Area covered by habitat

5.1 Year or period	1979-2018		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value 333.83
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	Stable (0)		
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval
5.8 Short-term trend Method used	Based mainly on extrapolation from a limited amount 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	Less than (<)	
	c) Unknown	No	
	d) Method	The FRA is much less than 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 The change is mainly due to: Improved knowledge/more accurate data		
5.15 Additional information	Note that the aim is to restore this habitat back to H7110 Active raised bog, which means that the FRA is much less than the current area and the area should be decreasing - for further details see the 2013 Article 17 UK Approach document.		

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0.44	Maximum 0.44
	b) Area in not-good condition (km²)	Minimum 152.0466	Maximum 152.0466
	c) Area where condition is not known (km²)	Minimum 176.3434	Maximum 176.3434

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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	2000-2018
6.4 Short-term trend of habitat area in good condition Direction	Increasing (+)
6.5 Short-term trend of habitat area in good condition Method used	Based mainly on extrapolation from a limited amount of 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
Abandonment of management/use of other agricultural and agroforestry systems (all except grassland) (A07)	M
Burning for agriculture (A11)	M
Agricultural activities generating diffuse pollution to surface or ground waters (A26)	M
Agricultural activities generating air pollution (A27)	M
Drainage for use as agricultural land (A31)	H
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M
Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (B27)	H
Peat extraction (C05)	M
Problematic native species (I04)	M
Mixed source air pollution, air-borne pollutants (J03)	H

Threat	Ranking
Abandonment of management/use of other agricultural and agroforestry systems (all except grassland) (A07)	M
Burning for agriculture (A11)	M
Agricultural activities generating diffuse pollution to surface or ground waters (A26)	M
Agricultural activities generating air pollution (A27)	M
Drainage for use as agricultural land (A31)	H
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M
Modification of hydrological conditions, or physical alteration of water bodies and drainage for forestry (including dams) (B27)	H
Peat extraction (C05)	M

Problematic native species (I04)	M
Mixed source air pollution, air-borne pollutants (J03)	H

7.2 Sources of information	
7.3 Additional information	J03: 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

8.1 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

Reinstate appropriate agricultural practices to address abandonment, including mowing, grazing, burning or equivalent measures (CA04)
Reduce/eliminate air pollution from agricultural activities (CA12)
Manage drainage and irrigation operations and infrastructures in agriculture (CA15)
Adapt/change forest management and exploitation practices (CB05)
Habitat restoration/creation from resources, exploitation areas or areas damaged due to installation of renewable energy infrastructure (CC07)
Management, control or eradication of other invasive alien species (CI03)
Management of problematic native species (CI05)
Reduce impact of mixed source pollution (CJ01)
Reduce impact of multi-purpose hydrological changes (CJ02)
Restore habitats impacted by multi-purpose hydrological changes (CJ03)

8.6 Additional information

9. Future prospects

9.1 Future prospects of parameters	a) Range	Bad
	b) Area	Poor
	c) Structure and functions	Bad
9.2 Additional information		Future trend of Range is Overall stable; Future trend of Area is Positive - decreasing <=1% (one percent or less) per year on average; and Future trend of Structure and functions is Overall stable. The Future prospects for Structure and functions takes into account that at least 25% of the habitat area is expected to be in unfavourable (not good) condition in c.2030 due to nutrient N critical load exceedance, unless measures are taken to reduce N deposition impacts.

10. Conclusions

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10.1. Range	Unfavourable - Bad (U2)
10.2. Area	Unfavourable - Bad (U2)
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	Improving (+)
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	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 greater than the Favourable Reference Range. Conclusion on Area covered by habitat reached because: (i) the short-term trend direction in Area is stable; and (ii) the current Area is greater than 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 bad; (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 - stable, and Structure and functions - increasing.

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 87.5886
11.2 Type of estimate	Best estimate
11.3 Surface area of the habitat type inside the network Method used	Complete survey or a statistically robust estimate
11.4 Short-term trend of habitat area in good condition within the network Direction	Increasing (+)
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

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11.6 Additional information

12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

Distribution Map

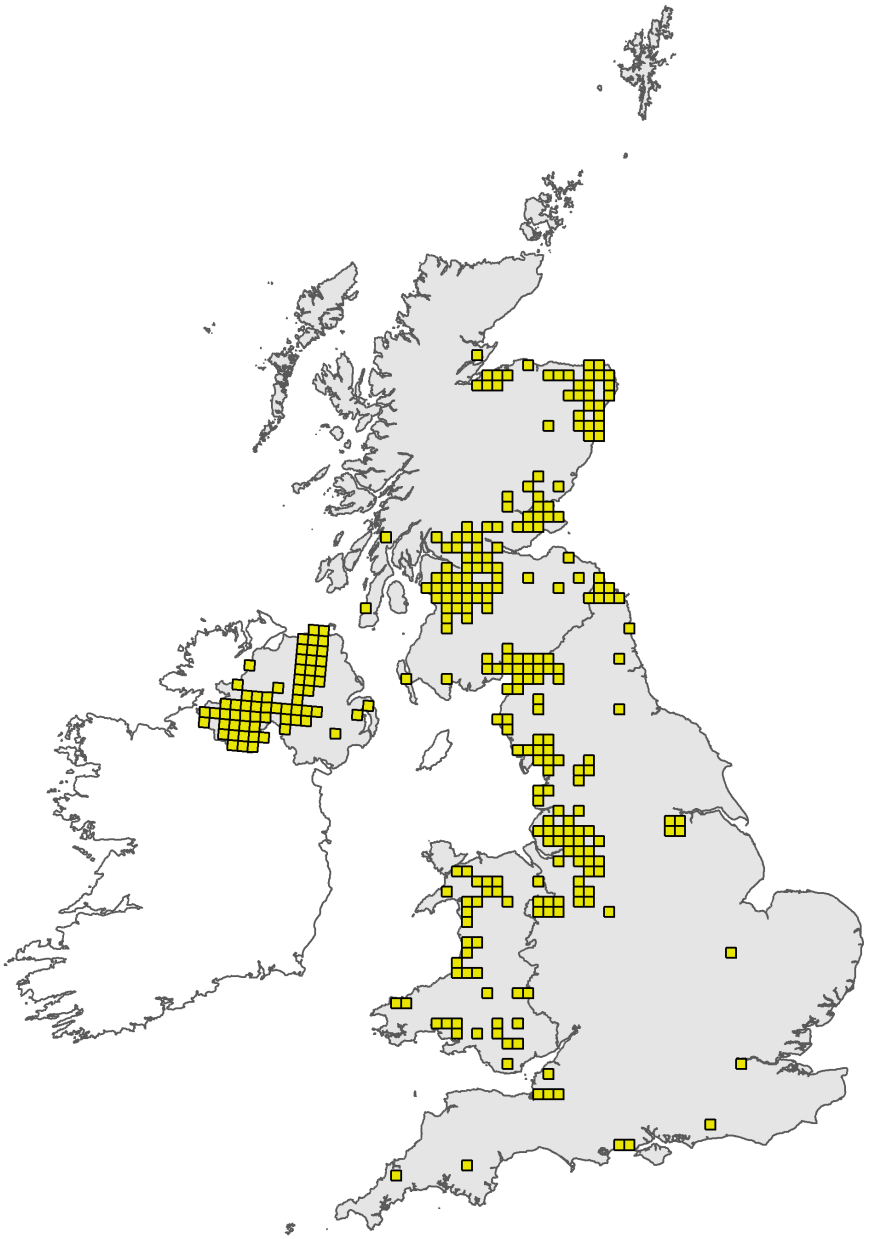

Figure 1: UK distribution map for H7120 - Degraded raised bogs still capable of natural regeneration. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

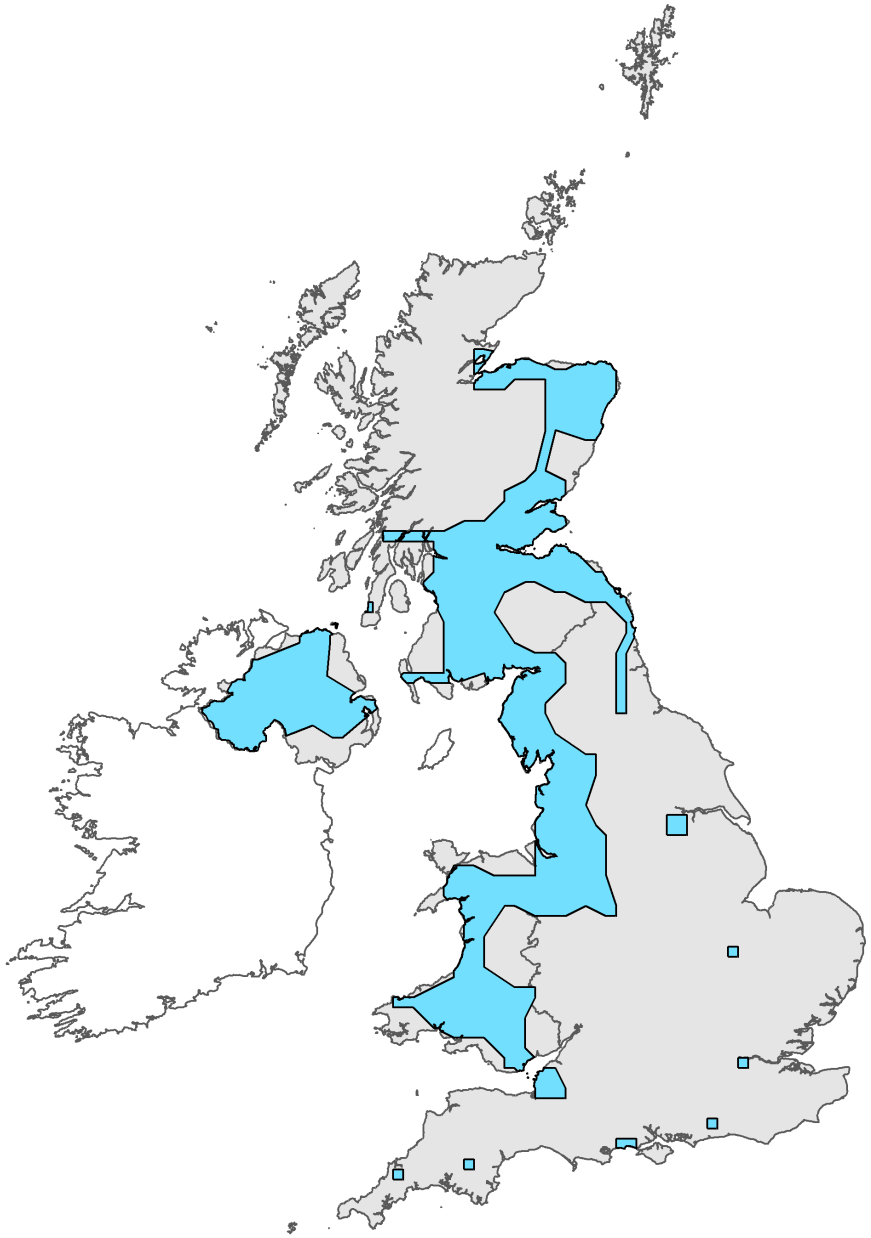

Figure 2: UK range map for H7120 - Degraded raised bogs still capable of natural regeneration. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.