# 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:

H7150 - Depressions on peat substrates of the *Rhynchosporion* 

**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	7150 - Depressions on peat substrates of the Rhynchosporion

#### 2. Maps

2.1 Year or period	1962-2018
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

3.2 Sources of information

Atlantic (ATL)

England

Natural England (2015). Hydrological Functioning Theme Plan. Restoring the hydrology of Natura 2000 terrestrial wetlands. IPENS programme Tratt, R., Eades, P., Shaw, S., Wheeler, B. & Parnell, M. (2017) Development of Inventories for Annex 1 Wetland Habitats in England. Draft report to Natural England, Telford.

http://jncc.defra.gov.uk/pdf/Article17Consult\_20131010/H7150\_ENGLAND.pdf MAINSTONE, C., HALL., R. & DIACK, I. 2016. A narrative for conserving freshwater and wetland habitats in England. Natural England Research Reports, Number 064. http://publications.naturalengland.org.uk/publication/6524433387749376 Natural England (2014) Climate Change Adaptation Manual - Evidence to support nature conservation in a changing climate

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Diack, I. (2016) Review of SSSI series for Raised Bogs. Unpublished Natural England report

Meade, R. (2015 et seq.) VEGETATION, HABITAT AND ECO-HYDROLOGICAL INTERPRETATION OF NEW FOREST MIRES. Unpublished reports to Natural England, Telford.

Wheeler, B. & Wilson, P. (2014) Survey of EC Habitats Directive Annex I wetland habitats in the Dorset heaths. Unpublished Report to Natural England, Telford. Stroh, P.A., Leach, S.J., August, T.A., Walker, K.J., Pearman, D.A., Rumsey, F.J., Harrower, C.A., Fay, M.F., Martin, J.P., Pankhurst, T., Preston, C.D. and Taylor, I. (2014). A Vascular Plant Red List for England. Botanical Society of the British Isles. Stallegger, M. (2008) Management of Natura 2000 habitats. 7150 Depressions on peat substrates of the Rhynchosporion. Report to the European Commission. Scotland

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Wales

Birch, K.S. (in prep.). Lowland Peat Survey Site Report for SH64/27P Llyn Hafod-y-llyn. Natural Resources Wales, Bangor

Bosanquet, S.D.S. (2013). Lowland Peat Survey Site Report for SH61/14P Cors Gregennan. Natural Resources Wales, Bangor.

Bosanquet, S.D.S. (2015). Lowland Peat Survey Site Report for SH61/14aP Llynnau Cregennan. Natural Resources Wales, Bangor.

Dwyer, J. (2018). The Implications of Brexit for Agriculture, Rural Areas and Land Use in Wales. Wales Centre for Public Policy.

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., 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. (2012). Distribution, extent and status of Annex I wetland habitats in Wales: supporting material for the 2013 Article 17 assessment. Countryside Council for Wales, Bangor.

Kay, L. (2018). N deposition extent of exceedance of CL for article 17 all habitats 2018, Excel s/s/. Natural Resources Wales, Bangor.

Milner, R. (2018). H7150\_area\_results\_R-Millner\_final. Excel s/s. Natural Resources Wales, Bangor.

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NRW (2016b). New LIFE for Welsh Raised Bogs LIFE16 NAT/UK/000646). Application (successful) for EU LIFE Nature Funding. Natural Resources Wales, Bangor.

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Robinson, F. (2010). Cors Fochno SAC Monitoring Report: Active raised bogs, Degraded raised bogs still capable of natural regeneration and Depressions on peat substrates of the Rhynchosporion. Monitoring Round 2 (2007-2012). CCW Report, February 2010.

Schulz, J. (2004). Late-Holocene mire development of the lowland raised bogs Cors Caron and Cors Fochno: a palaeoecological approach using high resolution macrofossil analysis. Unpublished Ph.D. thesis, University of Southampton. Stevens, J. (2012a). GIS layer - data processing notes - A17 reporting 2012 H7150. Internal file note, Countryside Council for Wales.

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N.Ireland

Cooper, A. & McCann, T. (2001). The Northern Ireland Countryside Survey 2000. Environment and Heritage Service, Belfast

Cooper, A., McCann, T. and Rogers, D. (2009) Northern Ireland Countryside Survey 2007: Broad Habitat Change 1998-2007. Northern Ireland Environment Agency. Northern Ireland Environment Agency Research and Development Series No. 09/06. Belfast. 58 pp.

McCann, T., Rogers, D. and Cooper, A. (2009) Northern Ireland Countryside Survey 2007: Field methods and technical manual. Northern Ireland Environment Agency. Northern Ireland Environment Agency, Research and Development Series No 09/07. Belfast.

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Corbett, P. McM. & Seymour, G. R. (1997). The conservation of peatland in Northern Ireland. In: Conserving Peatlands; Eds.: L. Parkyn, R.E. Stoneman and H.A.P. Ingram. CAB International, Wallingford, pp 348-356.

### 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

15679.41

2007-2018

Stable (0)

a) Minimum

b) Maximum

Based mainly on extrapolation from a limited amount of data

4.7 Long-term trend Direction

4.8 Long-term trend Magnitude

4.9 Long-term trend Method used

4.10 Favourable reference range

a) Minimum b) Maximum

a) Area (km²) 15679.41

b) Operator

c) Unknown No

d) Method The FRR is approximately equal to the current range area.

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

No change

The change is mainly due to:

4.12 Additional information

### 5. Area covered by habitat

5.1 Year or period

1993-2018

5.2 Surface area (in km²)

a) Minimum

b) Maximum

c) Best single

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

Insufficient or no data available

2007-2018

Stable (0)

a) Minimum

b) Maximum

Based mainly on expert opinion with very limited data

c) Confidence

interval

5.8 Short-term trend Method used

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

c) Unknown

d) Method The FRA is unknown. 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

No change

The change is mainly due to:

No

5.15 Additional information

#### 6. Structure and functions

6.1 Condition of habitat

a) Area in good condition

(km²)

b) Area in not-good condition (km²)

Minimum 5.5

Maximum

Minimum 6.714

Maximum

6.2 Condition of habitat Method used
6.3 Short-term trend of habitat area in good condition Period
6.4 Short-term trend of habitat area in good condition Direction
6.5 Short-term trend of habitat area in good condition Method used
6.6 Typical species
6.7 Typical species Method used
6.8 Additional information

c) Area where condition is Minimum 0.041 Maximum 0.041 not known (km²)

Based mainly on extrapolation from a limited amount of data

2006-2018

Stable (0)

Based mainly on extrapolation from a limited amount of data

Has the list of typical species changed in comparison to the previous No reporting period?

There is insufficient information to report on the maximum area of habitat in unfavourable (not good) condition, as statistics are lacking for Northern Ireland. The information that is available indicates at least 55% of the habitat in England, Scotland and Wales is likely to be in unfavourable condition, and the same applies to a high proportion of the habitat in Northern Ireland (particularly on Active Raised Bog).

### 7. Main pressures and threats

#### 7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Extensive grazing or undergrazing by livestock (A10)	M
Burning for agriculture (A11)	M
Drainage for use as agricultural land (A31)	M
Management of fishing stocks and game (G08)	M
Other invasive alien species (other then species of Union concern) (IO2)	M
Problematic native species (I04)	M
Mixed source air pollution, air-borne pollutants (J03)	Н
Drainage (K02)	Н
Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	Ranking M
Intensive grazing or overgrazing by livestock (A09)	M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)	M M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)  Burning for agriculture (A11)	M M M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)  Burning for agriculture (A11)  Drainage for use as agricultural land (A31)	M M M M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)  Burning for agriculture (A11)  Drainage for use as agricultural land (A31)  Management of fishing stocks and game (G08)  Other invasive alien species (other then species of Union	M M M M M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)  Burning for agriculture (A11)  Drainage for use as agricultural land (A31)  Management of fishing stocks and game (G08)  Other invasive alien species (other then species of Union concern) (I02)	M M M M M M M
Intensive grazing or overgrazing by livestock (A09)  Extensive grazing or undergrazing by livestock (A10)  Burning for agriculture (A11)  Drainage for use as agricultural land (A31)  Management of fishing stocks and game (G08)  Other invasive alien species (other then species of Union concern) (I02)  Problematic native species (I04)	M M M M M M M M M M

Droughts and decreases in precipitation due to climate M change (NO2)

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

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

Maintain existing extensive agricultural practices and agricultural landscape features (CA03)

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

Reduce/eliminate air pollution from agricultural activities (CA12)

Manage drainage and irrigation operations and infrastructures in agriculture (CA15)

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

Management, control or eradication of other invasive alien species (CI03)

Management of problematic native species (CI05)

Reduce impact of mixed source pollution (CJ01)

Restore habitats impacted by multi-purpose hydrological changes (CJ03)

8.6 Additional information

### 9. Future prospects

9.1 Future prospects of parameters	a) Range b) Area	Good Unknown
	c) Structure and functions	Bad
9.2 Additional information	Future trend of Range is O	verall stable; Future trend of Area is C

Overall stable: and Future trend of Structure and functions is Very negative - important deterioration.

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

10.1. Range	Favourable (FV)	
10.2. Area	Unknown (XX)	

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

Unfavourable - Bad (U2)

Unfavourable - Bad (U2)

Unfavourable - Bad (U2)

Stable (=)

a) Overall assessment of conservation status

No change

The change is mainly due to:

b) Overall trend in conservation status

Genuine change

The change is mainly due to: Genuine change

10.8 Additional information Conclusion on Range reached because: (i) the s

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 stable; and (ii) the Favourable Reference Area is unknown. 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 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 - stable, and Structure and functions - stable.

The Overall trend in Conservation Status has changed between 2013 and 2019 because the Area and Structure and functions trends have changed from decreasing to stable.

### 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 12.333

Best estimate

Based mainly on extrapolation from a limited amount of data

Increasing (+)

Complete survey or a statistically robust estimate

### 12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

### **Distribution Map**

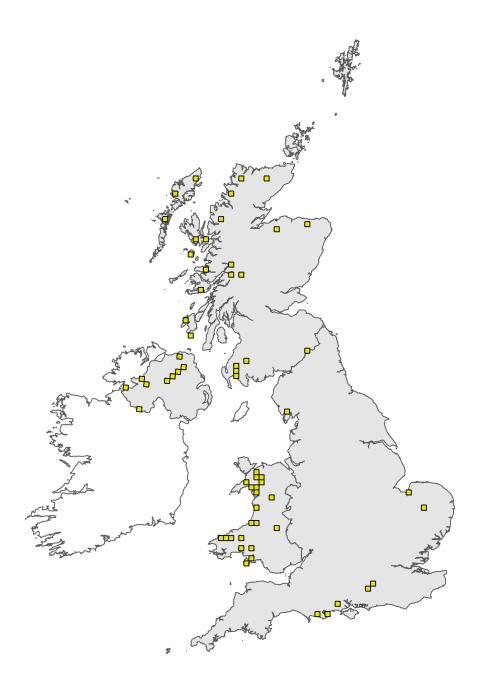


Figure 1: UK distribution map for H7150 - Depressions on peat substrates of the *Rhynchosporion*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

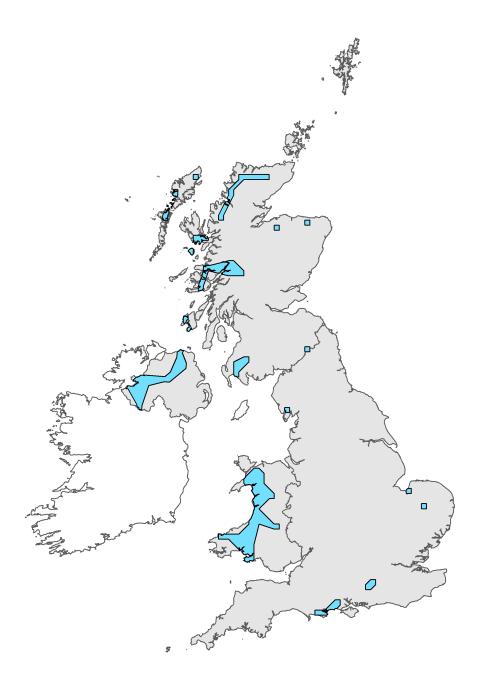


Figure 2: UK range map for H7150 - Depressions on peat substrates of the *Rhynchosporion*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.