

**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:

**H4010 - Northern Atlantic wet heaths with *Erica
tetralix***

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.

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 (England information only)
1.2 Habitat code	4010 - Northern Atlantic wet heaths with <i>Erica tetralix</i>

2. Maps

2.1 Year or period	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	<p>CRITCHLEY, N. 2011. Condition surveys of upland priority habitats in England: blanket bog. ADAS report to Natural England, Sheffield.</p> <p>DIAZ, A., KEITH, S.A., BULLOCK, J.M., HOOFFMAN, D.A.P., NEWTON, A. 2013. Conservation implications of long-term changes detected in a lowland heath plant metacommunity. <i>Biological Conservation</i>, 167: 325-333.</p> <p>FAGUNDEZ, J. 2012. Heathlands confronting global change: drivers of biodiversity loss from past to future scenarios. <i>Ann Bot.</i> 2013 Feb; 111(2): 151-172.</p> <p>GROOME, G.M.; SHAW, P. 2015. Vegetation response to the reintroduction of cattle grazing on an English lowland valley mire and wet heath. <i>Cons.Evid.</i>, 12: 33-39. TURAL ENGLAND's Designated Sites database. Accessed Feb-mar 2018. Habitat condition, threats and pressures. https://designatedsites.naturalengland.org.uk/</p>

4. Range

4.1 Surface area (in km ²)	
4.2 Short-term trend Period	
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	
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 (km ²) b) Operator c) Unknown No d) Method
4.11 Change and reason for change in surface area of range	No change The change is mainly due to:
4.12 Additional information	

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

4.12 Additional information

5. Area covered by habitat

5.1 Year or period	2018-018-		
5.2 Surface area (in km ²)	a) Minimum	b) Maximum	c) Best single value 661.03
5.3 Type of estimate	Best estimate		
5.4 Surface area Method used	Complete survey or a statistically robust estimate		
5.5 Short-term trend Period	2012-2018		
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	Complete survey or a statistically robust estimate		
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 (km ²) b) Operator c) Unknown No d) Method		
5.14 Change and reason for change in surface area of range	No change The change is mainly due to:		
5.15 Additional information			

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km ²) Minimum 144.07 Maximum 144.07 b) Area in not-good condition (km ²) Minimum 516.97 Maximum 516.97 c) Area where condition is not known (km ²) Minimum 0 Maximum 0
6.2 Condition of habitat Method used	Complete survey or a statistically robust estimate
6.3 Short-term trend of habitat area in good condition Period	2012-2018
6.4 Short-term trend of habitat area in good condition Direction	Decreasing (-)
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	Lowland heathland - Fav cond: 89.35 km ² ; Upland heath - Fav Cond: 54.71 km ² Lowland heathland - Unfav cond: 87.32 km ² ; Upland heath - Unfav Cond: 429.65 km ²

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Burning for agriculture (A11)	H
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M
Wind, wave and tidal power, including infrastructure (D01)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M
Mixed source air pollution, air-borne pollutants (J03)	H
Sports, tourism and leisure activities (F07)	H
Management of fishing stocks and game (G08)	H
Temperature changes (e.g. rise of temperature & extremes) due to climate change (N01)	M
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Burning for agriculture (A11)	H
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M
Wind, wave and tidal power, including infrastructure (D01)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M
Mixed source air pollution, air-borne pollutants (J03)	H
Sports, tourism and leisure activities (F07)	H
Management of fishing stocks and game (G08)	H
Temperature changes (e.g. rise of temperature & extremes) due to climate change (N01)	H
Natural succession resulting in species composition change (other than by direct changes of agricultural or forestry practices) (L02)	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 (related to 'Habitat for the species')	

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

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	

Management of habitats (others than agriculture and forest) to slow, stop or reverse natural processes (CL01)
Recreate Annex I agricultural habitats (CA07)
Reduce impact of transport operation and infrastructure (CE01)
Reduce impact of mixed source pollution (CJ01)
Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Reducing the impact of (re-) stocking for fishing and hunting, of artificial feeding and predator control (CG03)
Adopt climate change mitigation measures (CN01)

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	

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 km ² in biogeographical/marine region)	a) Minimum b) Maximum c) Best single value	595.02
11.2 Type of estimate	Best estimate	

Report on the main results of the surveillance under Article 17 for Annex I habitat types (Annex D)

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	Decreasing (-)
11.5 Short-term trend of habitat area in good condition within network Method used	Based mainly on expert opinion with very limited data
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends
12.2 Other relevant information

Distribution Map

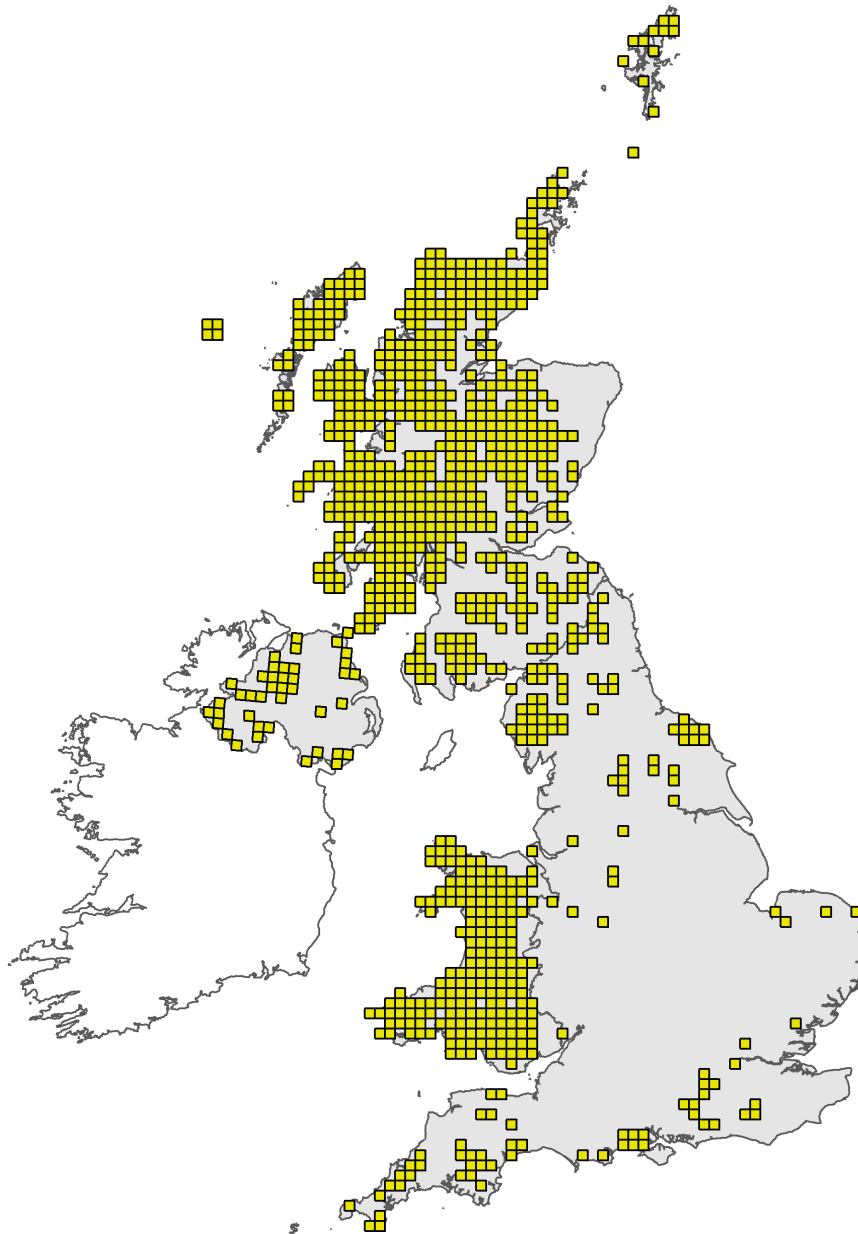


Figure 1: UK distribution map for H4010 - Northern Atlantic wet heaths with *Erica tetralix*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

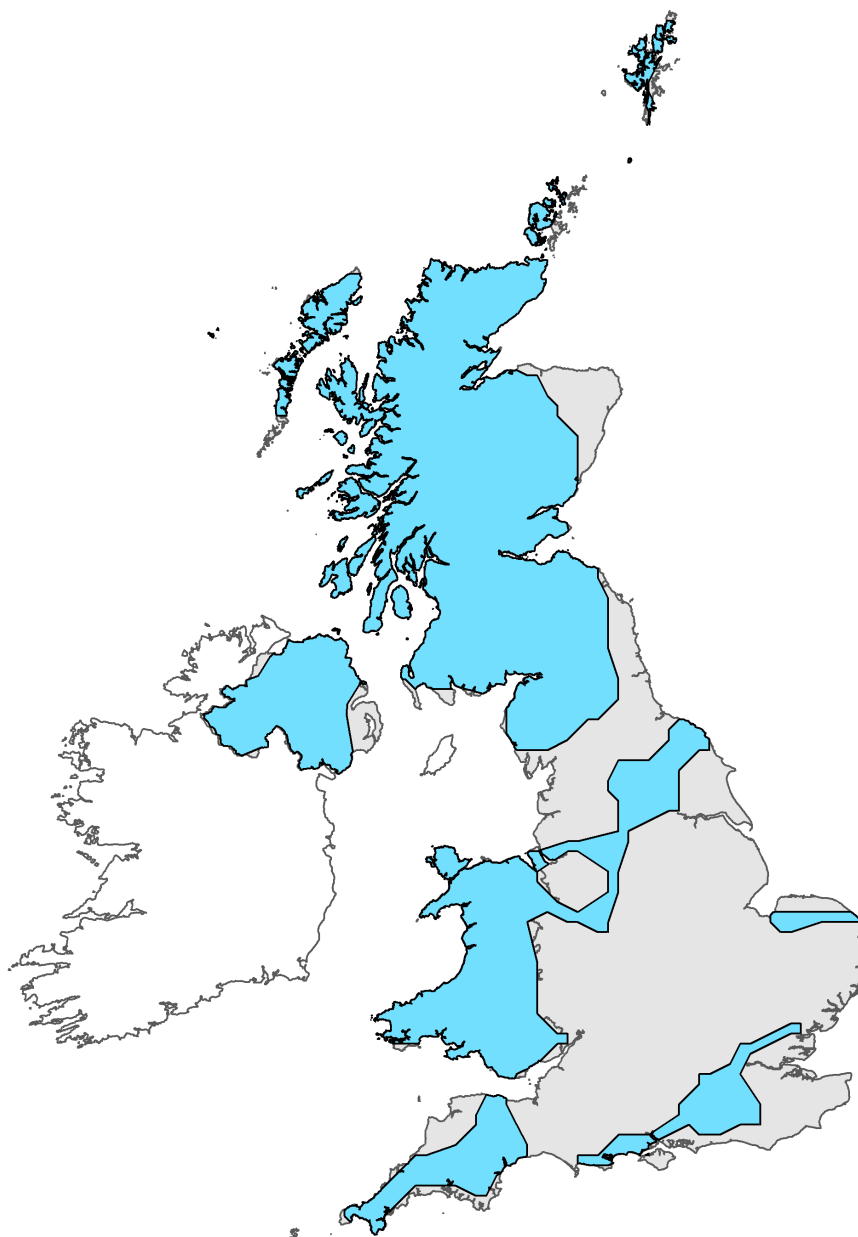


Figure 2: UK range map for H4010 - Northern Atlantic wet heaths with *Erica tetralix*. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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: 4010 Region code: ATL

Field label

Note

6.1 Condition of habitat

No figure for H4010 outside designated sites. Approx 17.5 km of lowland heath is non-designated, the majority will be H4030 but some will be H4010. The majority of H4010 will be in the uplands but the ENSIS figure is an overestimate. There is approximately 66.94 km of non-designated heath in the uplands the majority of which will be H4030 but some will H4010. Any figure for both upland and lowland will be spurious beyond reason.