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:

H4030 - European dry heaths

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	4030 - European dry heaths

2. Maps

2.4 Additional 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

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)

CRITCHLEY, N. 2011. Condition surveys of upland priority habitats in England: blanket bog. ADAS report to Natural England, Sheffield.

DIAZ, A., KEITH, S.A., BULLOCK, J.M., HOOFMAN, D.A.P., NEWTON, A. 2013. Conservation implications of long-term changes detected in a lowland heath plant metacommunity. Biological Conservation, 167: 325-333.

FAGUNDEZ, J. 2012. Heathlands confronting global change: drivers of biodiversity loss from past to future scenarios. Ann Bot. 2013 Feb; 111(2): 151-172.TURAL ENGLAND's Designated Sites database. Accessed Feb-mar 2018. Habitat condition, threats and pressures.

https://designatedsites.naturalengland.org.uk/

Thacker, J.I., Yallop, A.R. Clutterbuck, B. 2014. Burning in the English Uplands. A Review, Reconciliation and Comparison of Results of Natural England's Burn Monitoring: 2005-2014. IPENS 055, Natural England.

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 Magnitude4.5 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

4.11 Change and reason for change

4.10 Favourable reference range

- Stable (0)
- 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

in surface area of range

4.12 Additional information

5. Area	covered by	y habitat
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5.1 Year or period 2018-018-

5.2 Surface area (in km²) b) Maximum c) Best single 1487.58 a) Minimum

value

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

b) Maximum

c) Confidence

interval

5.12 Long-term trend Method used

5.13 Favourable reference area

a) Area (km²)

a) Minimum

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 Minimum 300.31 Maximum 300.31 a) Area in good condition

(km²)

b) Area in not-good Minimum 1187.27 Maximum 1187.27

condition (km²)

c) Area where condition is Minimum 0 Maximum 0

not known (km²)

6.2 Condition of habitat Method Complete survey or a statistically robust estimate

6.3 Short-term trend of habitat area

in good condition Period

2012-2018

Decreasing (-)

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

used

6.7 Typical species Method used

6.8 Additional information

Based mainly on extrapolation from a limited amount of data

Has the list of typical species changed in comparison to the previous

reporting period?

Lowland heathland - Fav cond: 141.88 km2; Upland heath - Fav Cond: 158.43 km2

Lowland heathland - Unfav cond: 119.50 km2; Upland heath - Unfav Cond:

1076.58 km2

7. Main pressures and threats

7.1 Characterisation of pr	ressures/threats
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7.1 Characterisation of pressures/threats	
Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Burning for agriculture (A11)	M
Mixed source air pollution, air-borne pollutants (J03)	M
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)	Н
Sports, tourism and leisure activities (F07)	M
Management of fishing stocks and game (G08)	Н
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) (LO2)	M
Threat	Ranking
Threat Intensive grazing or overgrazing by livestock (A09)	Ranking M
Intensive grazing or overgrazing by livestock (A09)	M
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11)	M H
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11) Mixed source air pollution, air-borne pollutants (J03) Conversion to forest from other land uses, or afforestation	M H M
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11) Mixed source air pollution, air-borne pollutants (J03) Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M H M M
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11) Mixed source air pollution, air-borne pollutants (J03) Conversion to forest from other land uses, or afforestation (excluding drainage) (B01) Wind, wave and tidal power, including infrastructure (D01) Roads, paths, railroads and related infrastructure (e.g.	M H M M
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11) Mixed source air pollution, air-borne pollutants (J03) Conversion to forest from other land uses, or afforestation (excluding drainage) (B01) Wind, wave and tidal power, including infrastructure (D01) Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M H M M H H
Intensive grazing or overgrazing by livestock (A09) Burning for agriculture (A11) Mixed source air pollution, air-borne pollutants (J03) Conversion to forest from other land uses, or afforestation (excluding drainage) (B01) Wind, wave and tidal power, including infrastructure (D01) Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01) Sports, tourism and leisure activities (F07)	M H M M H H M M M M H
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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	Restore the habitat of the species (r	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 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)

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

Adapt/manage renewable energy installation, facilities and operation (CC03)

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)

Control/eradication of illegal killing, fishing and harvesting (CG04)

Reduce impact of other specific human actions (CH03)

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 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 1347.59

Best estimate

Based mainly on extrapolation from a limited amount of data

Increasing (+)

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

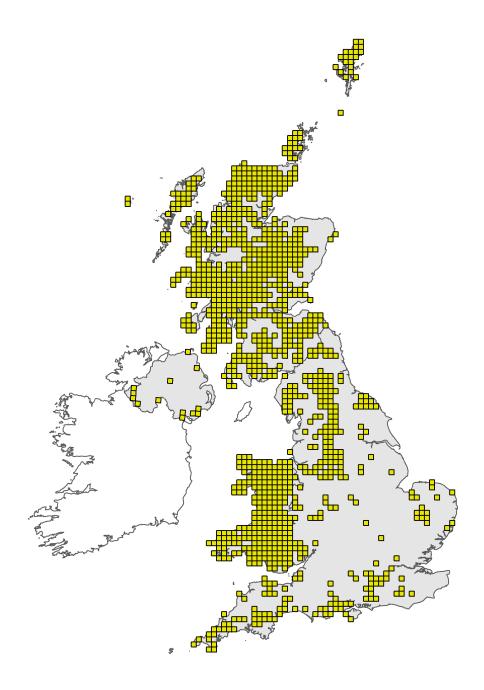


Figure 1: UK distribution map for H4030 - European dry heaths. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

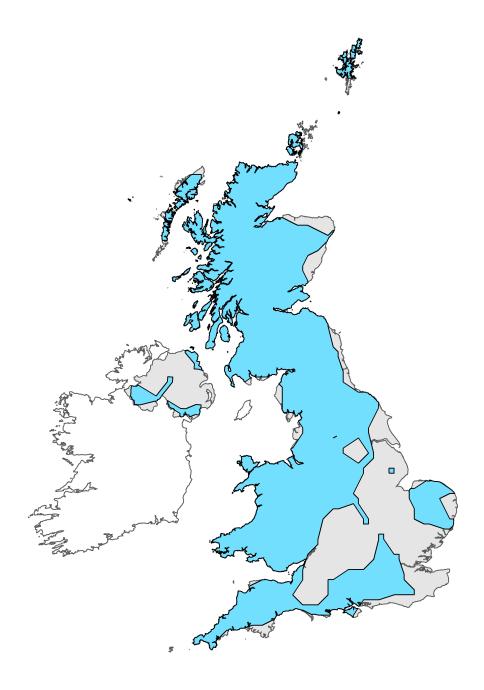


Figure 2: UK range map for H4030 - European dry heaths. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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: 4030 Region code: ATL		
Field label	Note	
6.1 Condition of habitat	Approximately 17.5 km and 66.94 km of heath in the lowlands and uplands res[pectively are not-designated. The majority will be H4030 but it is not possible to say what the actual proportion is.	
7. Main pressures and threats info	Some of the pressures, threats and conservation measures (e.g. game issues and infrastructure and roads) are relevant only, or much more so, to either lowland or upland occurrences of the habitat	