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:

H4080 - Sub-Arctic *Salix* spp. scrub

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	**4080 - Sub-Arctic Salix spp. scrub**

2. Maps

2.1 Year or period	2007-2018
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	http://www.lakedistrictweatherline.co.uk/__data/assets/pdf_file/0017/132506/winter_guide_conservation_section.pdfhttp://www.plantlife.org.uk/wild_plants/important_plant_areas/lake_district/ http://www.theuiaa.org/upload_area/files/1/Green-guide_UK_LakeDistrict-BMC.pdf CUMBRIA BIOLOGICAL DATA NETWORK. 2010. Montane Habitats. Http://www.lakelandwildlife.co.uk/biodiversity/pdfs/Montane habitats 100121 finished.pdf BACKSHALL, J., MANLEY, J., REBANE, M. 2001. Chapter 5: Montane areas. In: The Upland Management Handbook. English Nature, Peterborough. HORSFIELD, D. 2010. UK BAP PRIORITY HABITAT ACTION PLAN: Mountain heaths and willow scrub. Scottish Natural Heritage (Produced on behalf of UK BAP Upland Group SCOTTISH MONTANE WILLOW RESEARCH GROUP. 2005. Biodiversity: taxonomy, genetics and ecology of sub-arctic willow scrub. Royal Botanic Garden Edinburgh. WEBB, S. 2008. Restoration of downy willow in England. Scrubbers: The Bulletin of the Montane Scrub Action Group. No.7 pp 19-22. (http://www.mountainwoodlands.org/PUBLICATIONS-g.asp

4. Range

4.1 Surface area (in km²)		
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 (km²)	
	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	

5. Area covered by habitat

5.1 Year or period	2007-2018		
5.2 Surface area (in km²)	a) Minimum 0.005	b) Maximum 0.005	c) Best single value 0.005
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	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	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 (km²) 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 (km²)	Minimum 0	Maximum 0
	b) Area in not-good condition (km²)	Minimum 0.005	Maximum 0.005
	c) Area where condition is not known (km²)	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	2007-2018		
6.4 Short-term trend of habitat area in good condition Direction	Stable (0)		
6.5 Short-term trend of habitat area in good condition Method used	Complete survey or a statistically robust estimate		
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			

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6.8 Additional information

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	H
Sports, tourism and leisure activities (F07)	H
Mixed source air pollution, air-borne pollutants (J03)	M
Other climate related changes in abiotic conditions (N09)	H
Temperature changes (e.g. rise of temperature & extremes) due to climate change (N01)	H
Reduced fecundity / genetic depression (e.g. inbreeding or endogamy) (L05)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	H
Sports, tourism and leisure activities (F07)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Other climate related changes in abiotic conditions (N09)	H
Temperature changes (e.g. rise of temperature & extremes) due to climate change (N01)	H
Reduced fecundity / genetic depression (e.g. inbreeding or endogamy) (L05)	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')

8.3 Location of the measures taken: Only inside 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

- Adapt mowing, grazing and other equivalent agricultural activities (CA05)
- Reduce impact of outdoor sports, leisure and recreational activities (CF03)
- Reduce impact of mixed source pollution (CJ01)
- Adopt climate change mitigation measures (CN01)
- Reinforce populations of species from the directives (CS01)

8.6 Additional information

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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)	a) Minimum 0.005 b) Maximum 0.005 c) Best single value 0.005
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	Stable (0)
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	

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Distribution Map

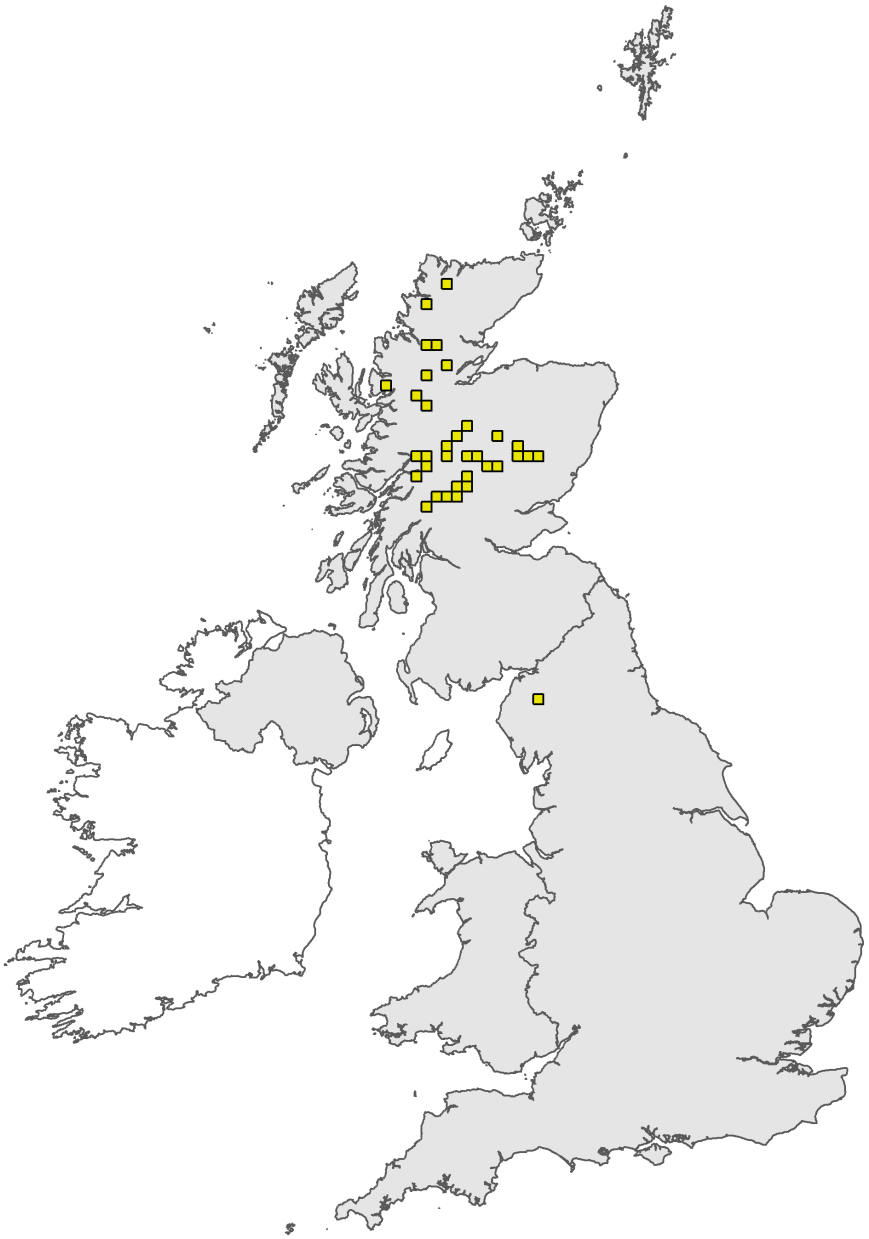

Figure 1: UK distribution map for H4080 - Sub-Arctic *Salix* spp. scrub. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

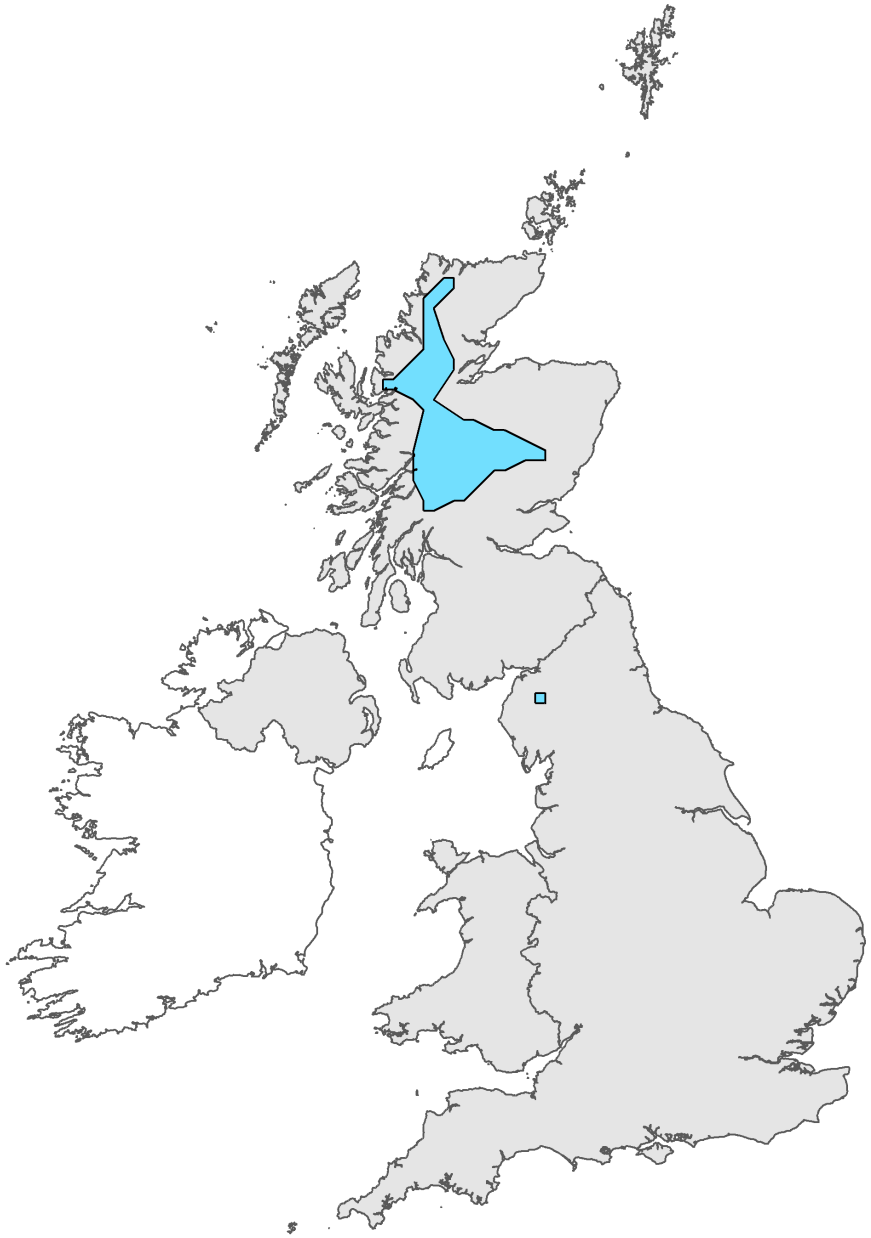

Figure 2: UK range map for H4080 - Sub-Arctic *Salix* spp. scrub. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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: 4080

Field label	Note
2.2 Distribution map	2013 UK Habitat Reporting Data used.

Habitat code: 4080 Region code: ATL

Field label	Note
5.6 Short term trend; Direction	Area has had 1,000 Downy Willow plants introduced.
6.1 Condition of habitat	Area is adjudged to be in recovering condition following introduction of Downy Willow1,000 plants
9.1 Future prospects of parameters	The introduction of new plants is intended to re-inforce the population but it is too soon to assess the success of this work.
11.5 Short term trend of habitat area in good condition within the network; Method used	The recent planting is felt to make the population more secure (originally only around 20 plants remained)