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:

H91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles

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.

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**
1.2 Habitat code	**91A0 - Old sessile oak woods with Ilex and Blechnum in the British Isles**

2. Maps

2.1 Year or period	1985-2018
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	**Atlantic (ATL)**
3.2 Sources of information	England Natural England's SSSI series review (unpublished) Scotland References within http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H91A0_SCOTLAND.pdf JNCC (2004) Common Standards Monitoring Guidance for Woodland Habitats, Version February 2004, http://jncc.defra.gov.uk/page-2238 Mitchell, R. J., Robinson, A-M., Leith, I. D., Cape, J. N., Van Dijk, N., Tang, Y. S., ... Sutton, M. A. (2005). A study of the epiphytic communities of Atlantic oak woods along an atmospheric nitrogen deposition gradient. Journal of Ecology, 93(3), 482-492. DOI: 10.1111/j.1365-2745.2005.00967.x Mitchell, Ruth & TRUSCOT, A.M. & LEITH, I.D. & CAPE, J.N. & van Dijk, Netty & Tang, Sim & Fowler, David & SUTTON, M.A.. (2005). A study of epiphytic communities of Atlantic oakwoods along an atmospheric nitrogen deposition gradient. Journal of Ecology. 93. 482 - 492. 10.1111/j.1365-2745.2005.00967.x. 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. Forestry Commission. 2011. National Forest Inventory Woodland Area Statistics: Wales: http://www.forestry.gov.uk/website/forestry.nsf/byunique/INFD-8EYJWF Forestry Commission 2018. Top tree diseases: Phytophthora ramorum.https://www.forestry.gov.uk/pramorum [Accessed 21/06/18] Guest, D. 2012. Assessing pressures and threats for Article 17 reporting based on information in CCW's Actions Database. CCW Staff Guidance Note. JNCC, 2017. Habitat account - Forests. 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles http://jncc.defra.gov.uk/protectedsites/sacselection/habitat.asp?FeatureIntCode=H91A0 [Accessed 12/06/18] Keith, S.A., Newton, A.C., Morecroft, M.D., Bealey, C.E. & Bullock, J.M. 2009. Taxonomic homogenization of woodland plant communities over 70 years. DOI: 10.1098/rspb.2009.0938 Latham, J. 2001. National Vegetation Classification of woodland in Wales: a summary of survey results 1985-2000. CCW Natural Science Report, 01/7/1,

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4. Range

4.1 Surface area (in km²)	151759.57	
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)	151759.57
	b) Operator	
	c) Unknown	No
	d) Method	The FRR is approximately equal to the current range area. The FRR value has been updated to take account of improved information on the habitat range. 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	Improved knowledge/more accurate data	
	The change is mainly due to:	Improved knowledge/more accurate data
4.12 Additional information		

5. Area covered by habitat

5.1 Year or period	1985-2018			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	915.91
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	2001-2018			
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 expert opinion with very limited data			
5.9 Long-term trend Period				

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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)	1007.501	
	b) Operator		
	c) Unknown	No	
	d) Method	The FRA is not more than 10% above the current area. The FRA value has been updated to take account of improved information on the habitat area.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			

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum	64.0548	Maximum	64.0589
	b) Area in not-good condition (km²)	Minimum	227.8791	Maximum	227.8791
	c) Area where condition is not known (km²)	Minimum	624.33579	Maximum	624.33579
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	2007-2018				
6.4 Short-term trend of habitat area in good condition Direction	Unknown (x)				
6.5 Short-term trend of habitat area in good condition Method used	Insufficient or no data available				
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
Intensive grazing or overgrazing by livestock (A09)	H
Extensive grazing or undergrazing by livestock (A10)	M
Agricultural activities generating air pollution (A27)	M
Abandonment of traditional forest management (B04)	M
Thinning of tree layer (B12)	M
Hydropower (dams, weirs, run-off-the-river), including infrastructure (D02)	M

Plant and animal diseases, pathogens and pests (I05)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Other climate related changes in abiotic conditions (N09)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	H
Extensive grazing or undergrazing by livestock (A10)	M
Agricultural activities generating air pollution (A27)	M
Thinning of tree layer (B12)	M
Hydropower (dams, weirs, run-off-the-river), including infrastructure (D02)	M
Problematic native species (I04)	M
Plant and animal diseases, pathogens and pests (I05)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Other climate related changes in abiotic conditions (N09)	M

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		Maintain the current range, population and/or 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		

Adapt mowing, grazing and other equivalent agricultural activities (CA05)
Stop mowing, grazing and other equivalent agricultural activities (CA06)
Maintain existing traditional forest management and exploitation practices (CB02)
Reinstate forest management and exploitation practices (CB03)
Adapt/change forest management and exploitation practices (CB05)
Stop forest management and exploitation practices (CB06)
Reduce impact of hydropower operation and infrastructure (CC04)
Management, control or eradication of other invasive alien species (CI03)
Reduce impact of mixed source pollution (CJ01)
Implement climate change adaptation measures (CN02)

8.6 Additional information	

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9. Future prospects

9.1 Future prospects of parameters	a) Range	Good
	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 - increasing <=1% (one percent or less) per year on average; 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	Unfavourable - Inadequate (U1)
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	Stable (=)
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 information on nature of 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 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 current Area is not more than 10% below 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 good; (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 - unknown. If the very negative future trend in Structure and functions is also taken into account, the Overall trend would be deteriorating. The Overall trend in Conservation Status has changed between 2013 and 2019

because the Structure and functions trend has changed from decreasing to unknown [note that the reason for change is due to less information/accuracy or certainty in the information available].

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 148.8665
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	Complete survey or a statistically robust estimate
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

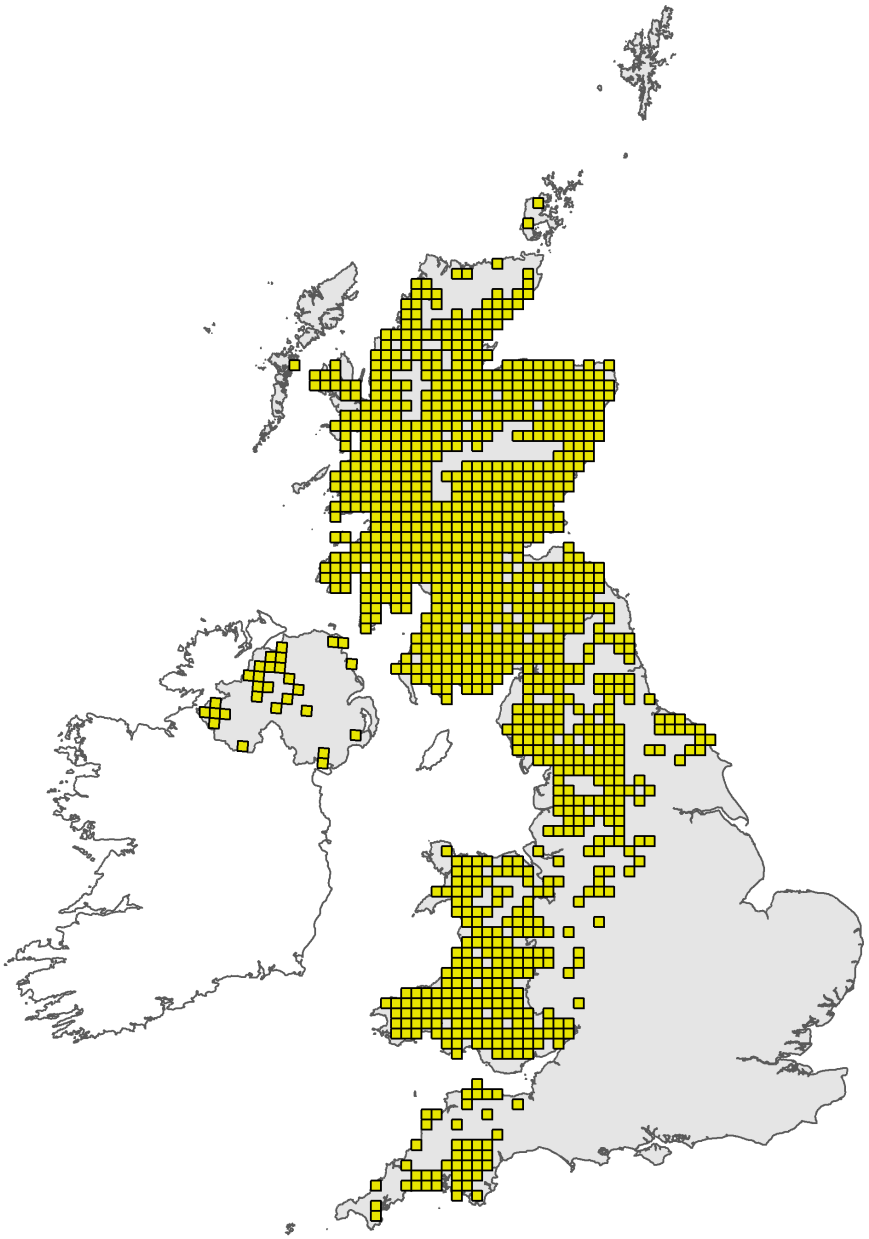

Figure 1: UK distribution map for H91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil 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

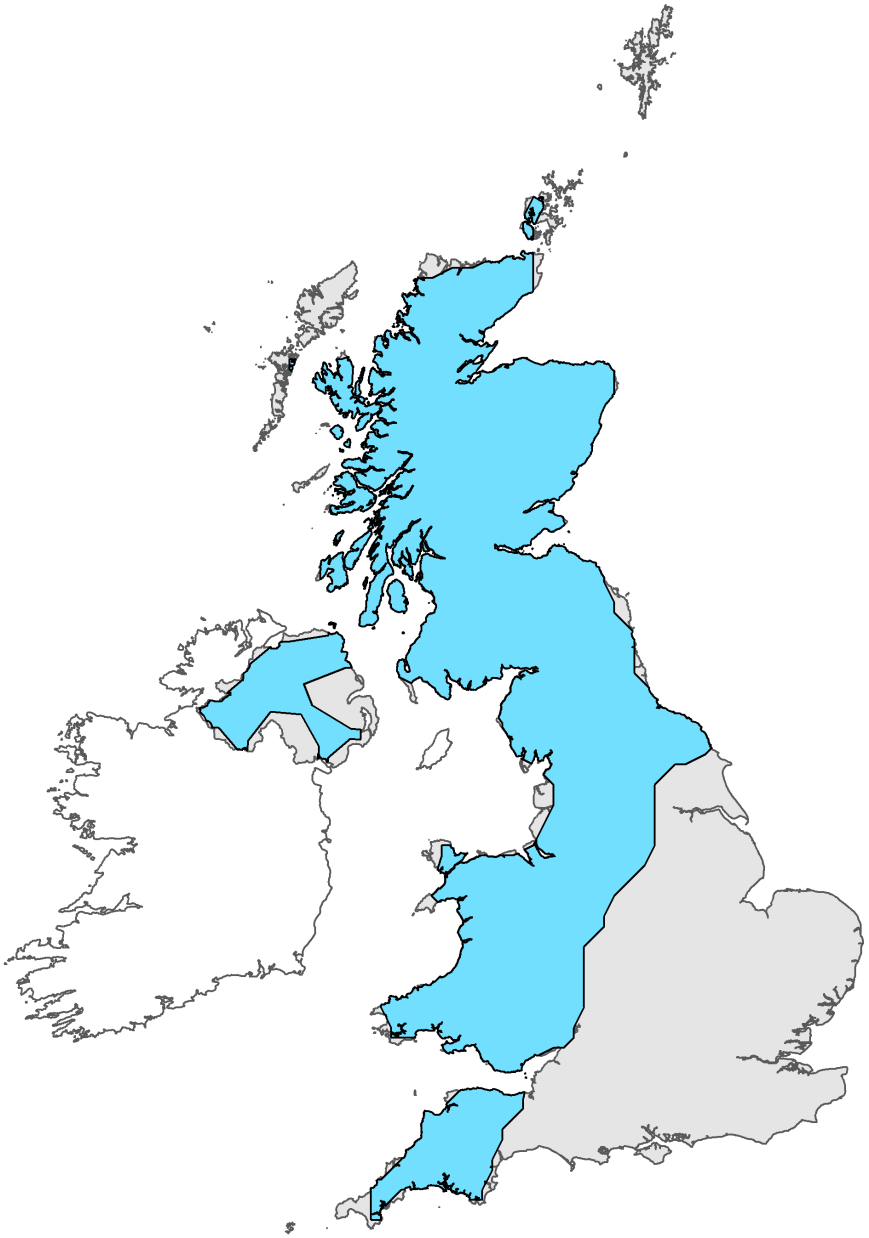

Figure 2: UK range map for H91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas 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.