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:

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

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

2. Maps

2.1 Year or period	2013-
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	Natural England's SSSI series review (unpublished)

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	2012-2018			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	200
5.3 Type of estimate	Best estimate			
5.4 Surface area Method used	Based mainly on expert opinion with very limited data			
5.5 Short-term trend Period	2007-2018			
5.6 Short-term trend Direction	Stable (0)			

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

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			
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 47	Maximum 47
	b) Area in not-good condition (km²)	Minimum 153	Maximum 153
	c) Area where condition is not known (km²)	Minimum 0	Maximum 0
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	Stable (0)		
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			

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.) (A05)	M
Intensive grazing or overgrazing by livestock (A09)	H
Agricultural activities generating air pollution (A27)	H
Replanting with or introducing non-native or non-typical species (including new species and GMOs) (B03)	H

Other invasive alien species (other then species of Union concern) (I02)	M
Management of fishing stocks and game (G08)	H
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	M
Mixed source air pollution, air-borne pollutants (J03)	H
Removal of dead and dying trees, including debris (B07)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	H
Agricultural activities generating air pollution (A27)	H
Replanting with or introducing non-native or non-typical species (including new species and GMOs) (B03)	H
Other invasive alien species (other then species of Union concern) (I02)	M
Management of fishing stocks and game (G08)	M
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	M
Mixed source air pollution, air-borne pollutants (J03)	H
Increases or changes in precipitation due to climate change (N03)	M
Removal of dead and dying trees, including debris (B07)	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		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/change forest management and exploitation practices (CB05)
Restore small landscape features on agricultural land (CA02)
Reduce/eliminate air pollution from agricultural activities (CA12)
Adapt/manage reforestation and forest regeneration (CB04)
Reducing the impact of (re-) stocking for fishing and hunting, of artificial feeding and predator control (CG03)
Reduce impact of multi-purpose hydrological changes (CJ02)
Reduce impact of mixed source pollution (CJ01)
Other measures related to natural processes (CL04)

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

Adopt climate change mitigation measures (CN01)

8.6 Additional information	All SAC sites have IPENs and Site Nitrogen Action Plans (SNAPs)

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 b) Maximum c) Best single value 52
11.2 Type of estimate	Best estimate
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	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

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

12.1 Justification of % thresholds for trends

12.2 Other relevant information

Distribution Map

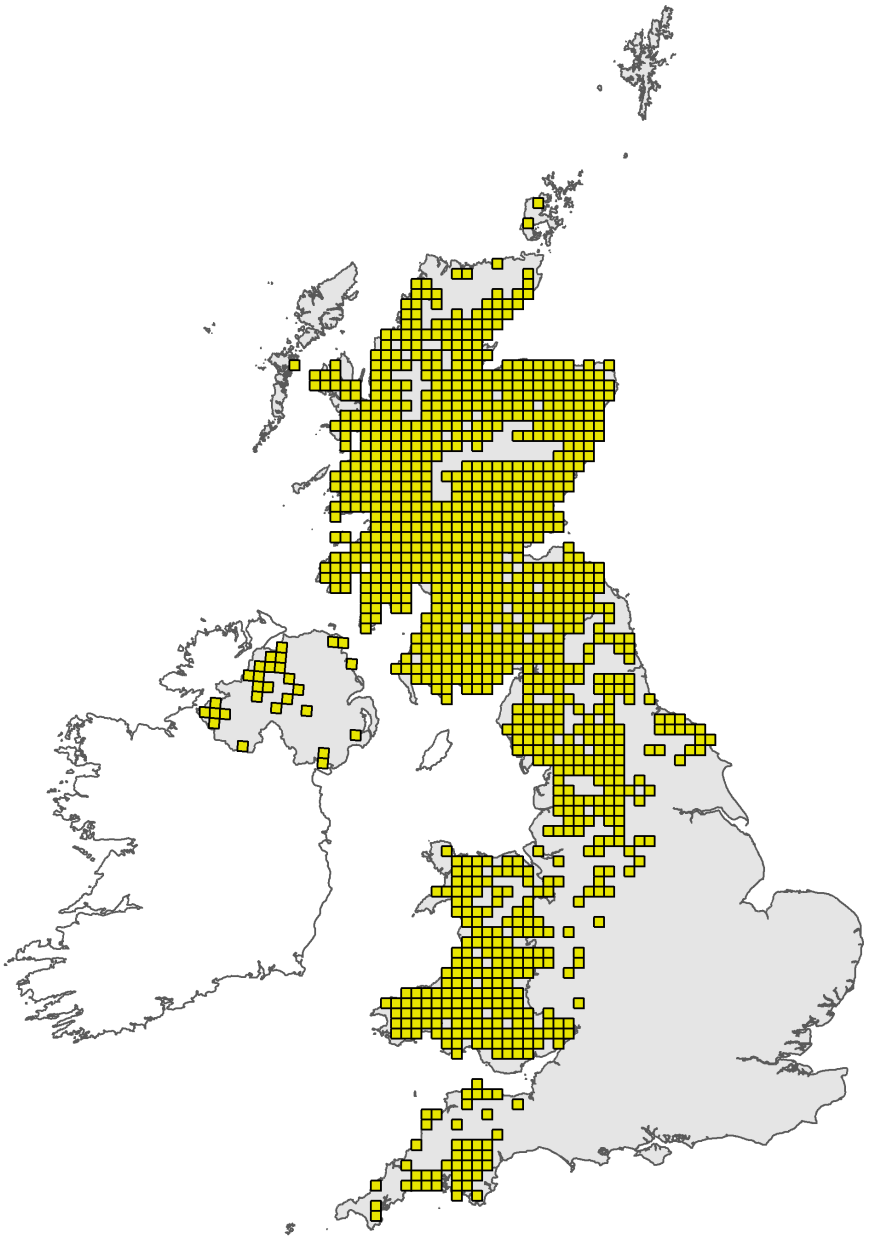

Figure 1: UK distribution map for H91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil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

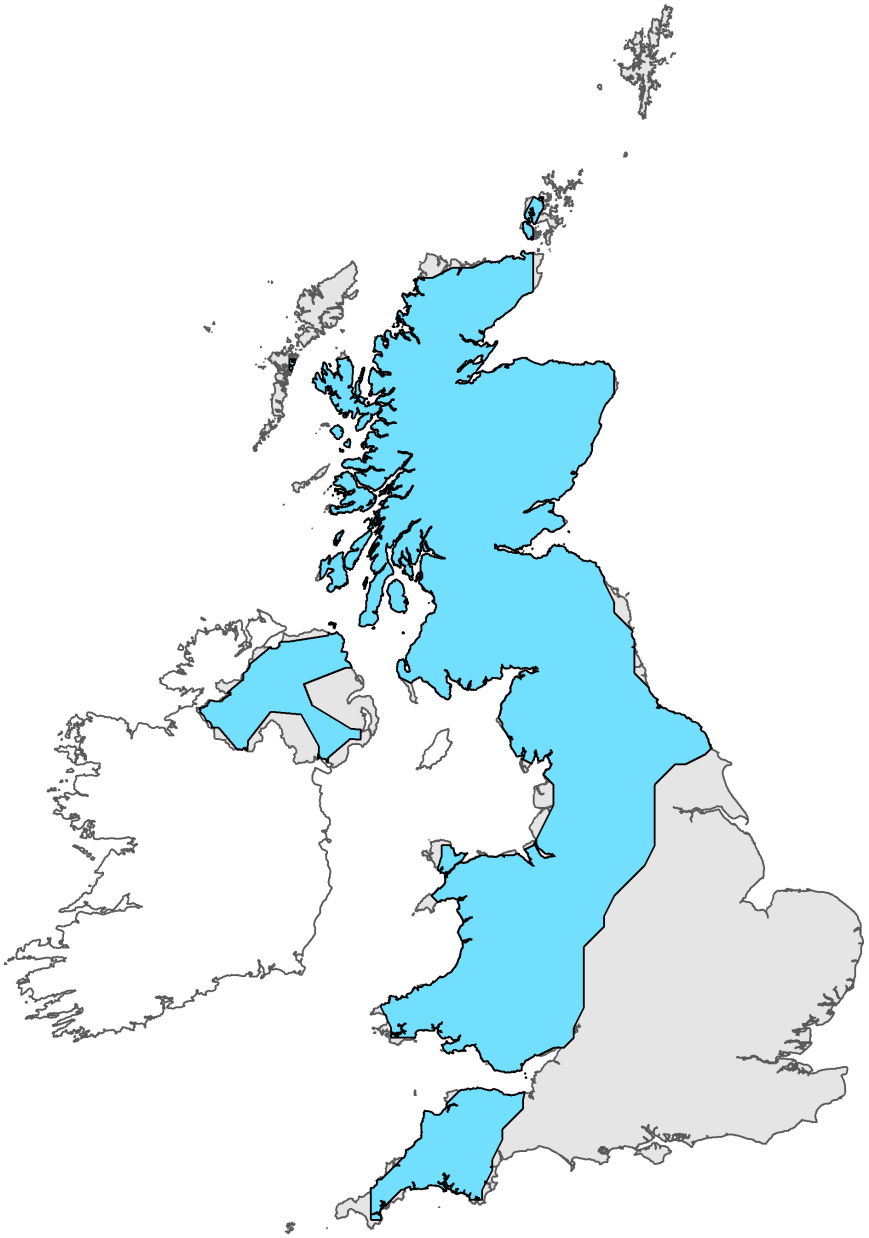

Figure 2: UK range map for H91A0 - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas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

Explanatory Notes

Habitat code: 91A0 Region code: ATL

Field label	Note
4.3 Short term trend; Direction	No evidence to suggest a change in trend direction since 2013 reporting round
5.1 Year or period	Previous report period to present
5.2 Surface area	No evidence for change since 2013 report
6.1 Condition of habitat	Figures taken from CSM data supplied from NE's CSMi dataset. Figures not felt to broadly represent the condition of the resource as a whole. Woodland is under-represented in the SSSI series (NE's SSSI series review 2016), and is generally undermanaged. Management effort focussed on maintaining or improving habitat condition inside protected sites is not reflected in effort outside the protected site series. The CSMi figures therefore probably overestimate the condition of the resource as a whole. The figures presented are based on the CSMi data % in good vs not good (24% v 76%). These figures have been used to scale the values from CSMi down so that columns BL&BM and BN&BO add up to the total habitat area under 5.2c (the values work out to be 4.7 and 15.3); as a consequence zero is the figure entered in columns BP
7.1 Characterisation of pressures/ threats	Threats: A27, A05 habitat fragmentation and spray drift from agricultural activities are likely to continue to have an impact on this habitat; B03 replanting with inappropriate species continues to be a threat as new species are being suggested by foresters; B07, B05 Lack of dead wood and lack of natural regeneration is likely to continue to be a threat to this habitat; G08, A09 The Deer Initiative project is expected to have a significant impact on deer populations over the next 4 years, which will reduce grazing and browsing pressure; I02 The presence of non-native species is likely to continue to have an impact on this habitat; J03 the CL threshold is exceeded throughout the range of this habitat. This habitat contains important lichen populations which are particularly sensitive to air pollution; L06 pathogen threat is likely to remain or increase; N03 increase in extreme precipitation events and increased storminess as a result of climate change (Climate Change manual) are likely to have an increasing impact on this habitat.
7.1 Characterisation of pressures/ threats	Pressures: A05 Agricultural intensification and changes to land management have resulted in the loss of hedges, trees and small patches of scrub in fields, which increases fragmentation and isolation amongst the remaining woodlands; A27 fertiliser and/or biocides spraydrift from agricultural activities causes nutrient enrichment and negative impacts on vegetation/fauna; B03 inappropriate planting of conifers, removal of understorey, introduction of sycamore, rhododendron, cherry laurel, Turkey oak; B05 lack of natural regeneration is a problem for this habitat, particularly old growth stands where continuity of habitat can only be achieved by having overlapping generations; B07 lack of dead wood has been highlighted across England woods by the FC National Forest Inventory survey; G08 Deer numbers and livestock (mainly sheep) are very high in the range of this habitat and consequently this is a high pressure on regeneration (CSM monitoring); I02 Invasive non-native species such as grey squirrels and non-native plant species such as rhododendron, sycamore, Turkey oak and cherry laurel alters the structure of the woodland and changes the soil; J03 the CL threshold is exceeded throughout the range of this habitat. This habitat contains important lichen populations which are particularly sensitive to air pollution; L06 The presence of tree diseases and pathogens such as Acute Oak Decline and Sudden Oak Death are having an impact on the health of the oak tree population in England.

8.1 Status of measures	Conservation measures have been identified through the HLF funded IPENS porject which has identified the main activities required to achieve favourable conservation status. Remedies for the conservation measures, although identified, have not always been
9.1 Future prospects of parameters	Range not expected to change; area not expected to change; S&F very negative due to exceedance of N_CLs
11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network	Figure provided by G. Hinton (Natural England) from CSM analysis.