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:

H9190 - Old acidophilous oak woods with *Quercus robur* on sandy plains

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	**9190 - Old acidophilous oak woods with Quercus robur on sandy plains**

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 d) Method	 No
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	45
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)			

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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 7.3	Maximum 7.3
	b) Area in not-good condition (km²)	Minimum 13.7	Maximum 13.7
	c) Area where condition is not known (km²)	Minimum 24	Maximum 24
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
Other invasive alien species (other then species of Union concern) (I02)	H
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	H
Abandonment of traditional forest management (B04)	H
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	M

Mixed source air pollution, air-borne pollutants (J03)	H
Removal of dead and dying trees, including debris (B07)	H
Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.) (A05)	M
Conversion from other land uses to commercial / industrial areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F03)	M
Management of fishing stocks and game (G08)	H

Threat	Ranking
Other invasive alien species (other then species of Union concern) (I02)	M
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	H
Abandonment of traditional forest management (B04)	H
Conversion from other land uses to housing, settlement or recreational areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F01)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Removal of dead and dying trees, including debris (B07)	H
Droughts and decreases in precipitation due to climate change (N02)	H
Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.) (A05)	M
Conversion from other land uses to commercial / industrial areas (excluding drainage and modification of coastline, estuary and coastal conditions) (F03)	H
Management of fishing stocks and game (G08)	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		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		

Reduce impact of outdoor sports, leisure and recreational activities (CF03)
Other measures related to natural processes (CL04)

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Reinstate forest management and exploitation practices (CB03)

Manage conversion of land for construction and development of infrastructure (CF01)

Restore small landscape features on agricultural land (CA02)

Adapt/change forest management and exploitation practices (CB05)

Adopt climate change mitigation measures (CN01)

Reducing the impact of (re-) stocking for fishing and hunting, of artificial feeding and predator control (CG03)

Reduce impact of mixed source pollution (CJ01)

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	Good
	b) Area	Good
	c) Structure and functions	Bad
9.2 Additional information	100% of area exceeds N CL threshold; presence of oak specific pests and diseases including Acute Oak Decline and Oak Processionary Moth, grey squirrels and need to control deer population to allow natural regeneration.	

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	Presence of disease impact on overall tree health. Exceedance of N_CL threshold

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	23
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	

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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

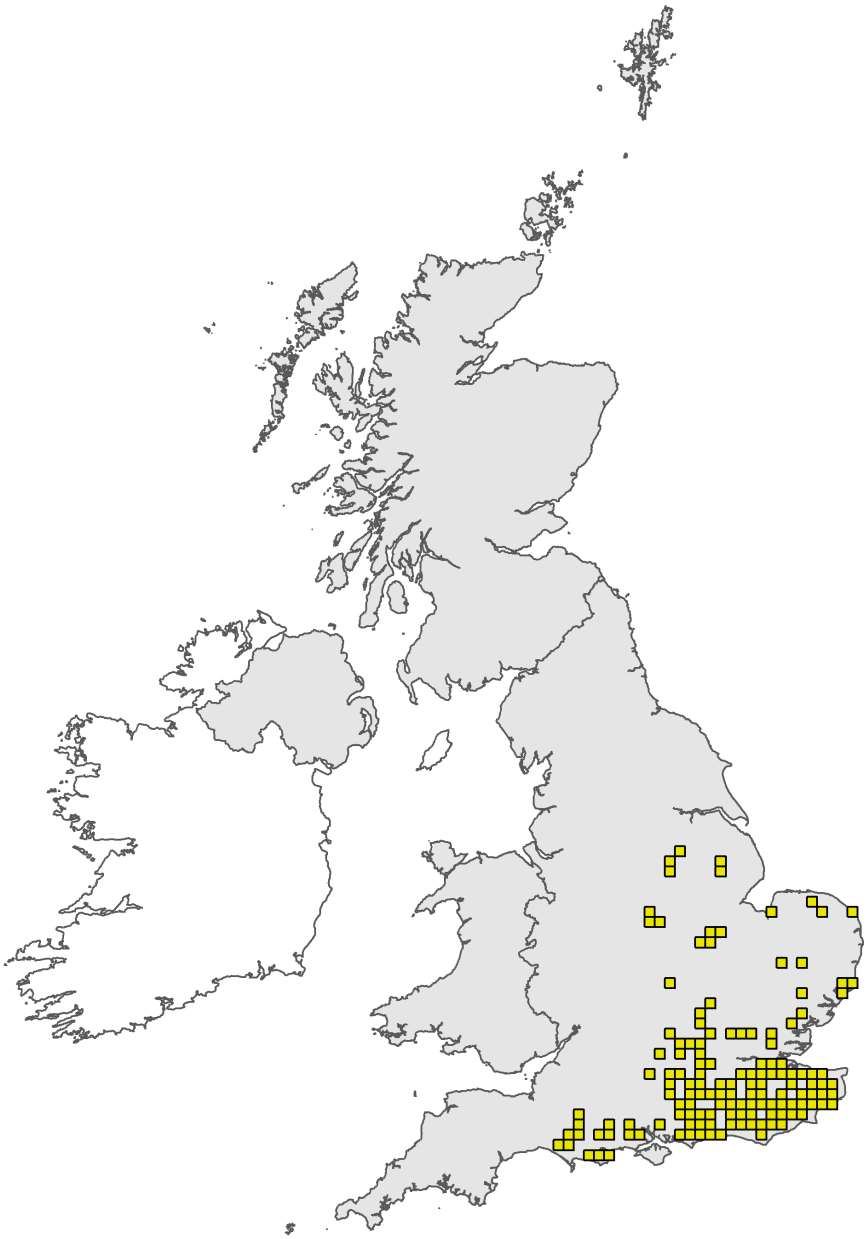

Figure 1: UK distribution map for H9190 - Old acidophilous oak woods with *Quercus robur* on sandy plains. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas 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

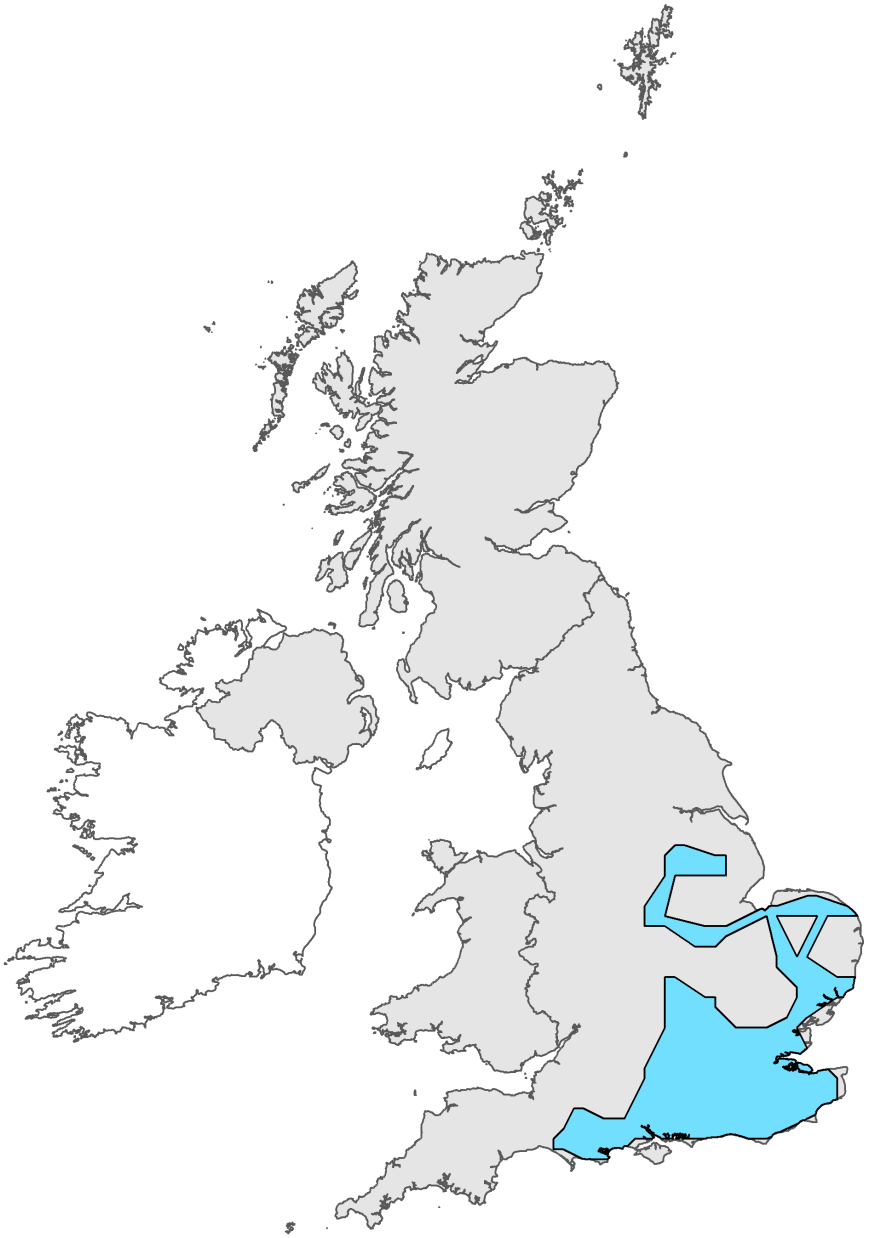

Figure 2: UK range map for H9190 - Old acidophilous oak woods with *Quercus robur* on sandy plains. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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: 9190 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
4.10 Favourable reference range	No evidence for change; same figures as 2013 report
5.1 Year or period	Previous report period to present
5.2 Surface area	No evidence for change since 2013 report
5.13 Favourable reference area	No evidence for change since 2013 report. Re-use 2013 figure
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.
7.1 Characterisation of pressures/ threats	B07: removal of dead and dying trees, including debris. Dead and decaying wood is vital to maintain the biodiversity value of this habitat, but its removal continues.
7.1 Characterisation of pressures/ threats	I02: Deer browsing by Cervus nippon, Dama dama and Munticaus reevesii where these species are not being effectively controlled they have a significantly negative impact on the condition of native woodland. Presence of Sciurus carolensis and Glis glis
7.1 Characterisation of pressures/ threats	B04: Loss of traditional management skills and practice as well as a lack of interest from woodland owners and little incentive for woodland owners to undertaken management.
7.1 Characterisation of pressures/ threats	J03: airbourne pollution from major roads and aircraft
7.1 Characterisation of pressures/ threats	A36: Agricultural activities not referred to elsewhere: spraydrift from adjacent farming activities
7.1 Characterisation of pressures/ threats	A07: Abandonment of management including grazing of wood pasture systems.
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; B04 lack of management results in darker woods and a consequent loss of ground flora. In old growth sites there may be a lack of replacement trees, which causes a break in the continuity of dead wood habitat and subsequent loss of specialised species; B07 the national forestry inventory survey has highlighted dead wood as a problem throughout all woodland habitats. In old growth woodlands, loss of veteran trees is a particular problem for wood pasture sites which support important veteran tree populations. This is compounded by neglect and loss of expertise in traditional tree management techniques such as pollarding; F01, F03 In the lowlands of England, and particularly in the south east, development pressure is high, and likely to increase; G08, I02 deer and grey squirrel populations are high in the range of this habitat, which has a negative impact on natural regeneration and survival of tree populations (CSM monitoring); J03 the critical load threshold is exceeded throughout the range of this habitat.

7.1 Characterisation of pressures/ threats	Threats: B04 Control of non-native plants and appropriate woodland management is encouraged by Government grants; A05, B07, J03, I02 and N02: habitat fragmentation, climate change, air pollution, the presence of problematic native and non-native species (including deer and grey squirrels) and the low volumes of deadwood are expected to continue to threaten the condition of this habitat; F01, F03 development pressure threatens the condition of this habitat, particularly in the south east of England, and this threat is likely to increase; G08 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.
7.1 Characterisation of pressures/ threats	F01: Primarily in the south of England, the conversion of land to housing and other developments is significant
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 and presesence of pests and disease including Oak Processionary moth (OPM) and Acute Oak Decline (AOD)
9.2 Additional information	Supplementary guidance on accounting for N CL exceedance concludes 100% of habitat exceeds CL
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.