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:

H5110 - Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.)

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	**5110 - Stable xerothermophilous formations with Buxus sempervirens on roc**

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	The Chilterns AONB 2015 The natural and cultural heritage of Box woodlands and trees in the Chilterns Part B A practical guide to managing Box woodlands and trees in the countryside https://www.rhs.org.uk/advice/profile?PID=760 Box Tree Caterpillar Diaphinia perspectalis (synonym Glyphodes perspectalis) 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 0.2
5.3 Type of estimate	Best estimate		

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5.4 Surface area Method used	Based mainly on extrapolation from a limited amount of data		
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	0.15	Maximum	0.15
	b) Area in not-good condition (km²)	Minimum	0	Maximum	0
	c) Area where condition is not known (km²)	Minimum	0.05	Maximum	0.05
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
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	H

Threat	Ranking
Interspecific relations (competition, predation, parasitism, pathogens) (L06)	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, but none yet taken
8.2 Main purpose of the measures taken		
8.3 Location of the measures taken		
8.4 Response to the measures		Medium-term results (within the next two reporting periods, 2019-2030)
8.5 List of main conservation measures		

Other measures related to natural processes (CL04)

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

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	Unknown
9.2 Additional information		Future impact of Box blight unknown

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 pests and disease has potential to impact overall health of Buxus in England. The impact of the presence of the disease on wlid box is presently unknown.

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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 0.2
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

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

Figure 1: UK distribution map for H5110 - Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.). 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 H5110 - Stable xerothermophilous formations with *Buxus sempervirens* on rock slopes (*Berberidion* p.p.). 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: 5110 Region code: ATL

Field label	Note
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
5.3 Type of estimate	Figures based on CSM which is a complete survey of the resource
5.4 Surface area; Method used	Habitat is limited to a single location covering about 20ha where box is native, and where stable formations have been present for many years with limited grazing and soil conditions are suitable.
5.6 Short term trend; Direction	Box blight is known to be present at the single location.
5.13 Favourable reference area	No alternative approach is suggested, 2013 figures re-used
6.1 Condition of habitat	Figures taken from CSM data supplied from NE's CSMi dataset
7.1 Characterisation of pressures/ threats	L06 Pressure: presence of Box Blight disease identified in the IPENS Site Improvement Plan. Threat: continued presence of Box Blight disease
7.1 Characterisation of pressures/ threats	Presence of box blight is noted in IPENS report for this site as the top priority pressure
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 not expected to change but future prospects unknown due to presence of box blight disease (caused by 2 fungi Cylindrocladium buxicola and Volutella buxi)
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