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:

H91E0 - Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

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	**91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padio**

2. Maps

2.1 Year or period	2006-2018
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) Natural England's IPENs Site Improvement Plan Scotland References within http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H91E0_SCOTLAND.pdf JNCC (2004) Common Standards Monitoring Guidance for Woodland Habitats, Version February 2004, http://jncc.defra.gov.uk/page-2238 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. Dargie, T. and Dargie, J. 1998. An inventory and conservation review of coastal grazing marsh and floodplain habitats in Wales. Stage 1, inventory. CCW Science Report, 274. Environment Agency 2004. Flood Zones for England. Issued by Flood Mapping Programme, Environment Agency, Rio House, Bristol. Forestry Commission 2011. National Forest Inventory Woodland Area Statistics: Wales: http://www.forestry.gov.uk/website/forestry.nsf/byunique/INFD-8EYJWF Forestry Commission 2018a. Top tree diseases Phytophthora alni. https://www.forestry.gov.uk/palni [Accessed 21/06/18] Forestry Commission, 2018b. Chalara dieback of ash (Hymenoscyphus fraxineus). https://www.forestry.gov.uk/ashdieback [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. Latham, J. 2000. Estimates of areas of woodland HSP types and HSD Annex 1 habitats in Wales. Unpublished CCW staff report. Latham, J. 2001. National Vegetation Classification of woodland in Wales: a summary of survey results 1985-2000. CCW Natural Science Report, 01/7/1, CCW, Bangor. Latham, J. 2003. Woodlands. In: Priority habitats of Wales: a technical guide. Jones, P.S., Blackstock, T.H., Burrows, C.R. and Howe, E.A. (Eds). Countryside Council for Wales, Bangor. Latham, J. & Rothwell, J. 2012. Estimates of the area and distribution of

woodland Annex 1 types in Wales based on GIS analyses. CCW Staff Report, CCW Bangor.
Latham, J., Sherry, J. and Rothwell, J. 2013. Ecological connectivity and biodiversity prioritisation in the terrestrial environment of Wales. CCW Staff Science Report No. 13/3/3. Countryside Council for Wales, Bangor.
Natural Resources Wales (NRW). 2013. Supporting documentation for the Third Report by the United Kingdom under Article 17 on the implementation of the Directive from January 2007 to December 2012 Conservation status assessment for Habitat: H91E0: Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion Incanae, Salicion albae) Available from: http://jncc.defra.gov.uk/pdf/Article17/FCS2007-H91E0-audit-final.pdf [accessed 19/06/18]
Natural Resources Wales (NRW). 2018. SAC and SPA Monitoring Programme Results 2013-2018. Available from: http://lle.gov.wales/catalogue/item/SACSPAMonitoringProgrammeResults/?lang=en [Accessed 19/0618)]
Peterken, G.F. & Hughes, F.M.R. 1995. Restoration of floodplain forests in Britain. Forestry 63 (3): 187-202.
Watts, K., Griffiths, M., Quine, C., Ray, D. & Humphrey, J.W. 2005. Towards a Woodland Habitat Network for Wales. CCW Science Report 686, CCW Bangor.
Welsh Government 2017. Natural Resources Policy. https://gov.wales/docs/desh/publications/170821-natural-resources-policy-en.PDF [Accessed 21/06/18]
JNCC 2017. Habitat account - Forests. 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) http://jncc.defra.gov.uk/ProtectedSites/SACselection/habitat.asp?FeatureIntCode=H91E0 [Accessed 21/06/18]
N.Ireland
Cooper, A. & McCann, T. (2001). The Northern Ireland Countryside Survey 2000. Environment and Heritage Service, Belfast
Cooper, A., McCann, T. and Rogers, D. (2009) Northern Ireland Countryside Survey 2007: Broad Habitat Change 1998-2007. Northern Ireland Environment Agency. Northern Ireland Environment Agency Research and Development Series No. 09/06. Belfast. 58 pp.
McCann, T., Rogers, D. and Cooper, A. (2009) Northern Ireland Countryside Survey 2007: Field methods and technical manual. Northern Ireland Environment Agency. Northern Ireland Environment Agency, Research and Development Series No 09/07. Belfast.
Murray, R., McCann, T. and Cooper, A. (1992). A Land Classification and Landscape Ecological Study of Northern Ireland. Department of the Environment NI and Department of Environmental Studies, University of Ulster, Coleraine.
Rodwell, J.S. (1991). British Plant Communities. Volume 1, Woodlands. Cambridge: Cambridge University Press
NIEA. Internal Condition Assessment Reports (various sites and years).
Rodwell, J.S., Dring, J.C., Averis, A.B.V., Proctor, M.C.F., Malloch, A.J.C., Schaminee, J.H.J & Dargie, T.C.D. 1998. Review of Coverage of the National Vegetation Classification. Lancaster: Unit of Vegetation Science report to the Joint Nature Conservation Committee.
Data on aerial Nitrogen deposition taken from Air Pollution Information System website - http://www.apis.ac.uk/
NIEA. Internal Survey Reports (various sites and years).
Graham, T. (1975). Private Woodland Inventory of Northern Ireland. (1975). Forest Service, Belfast.

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

Forest Service woodland register - data available online https://www.daera-ni.gov.uk/articles/forest-service-woodland-register
McCracken, E. 1971. The Irish Woods Since Tudor Times: Their Distribution and Exploitation. Insititute of Irish Studies, Belfast.
Rackham, O. 1995 Looking for Ancient Woodland in Ireland in Woods, Trees and Forests in Ireland, pp. 1-12. Pilcher, J.R. and Mac an tSaoir, S. S. (eds). Royal Irish Academy, Dublin.
Rodwell, J. & Dring, J. 2001. European significance of British woodland types. English Nature Research Report No. 460 (Volumes 1-2). English Nature, Peterborough.

4. Range

4.1 Surface area (in km²)	194652.73	
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)	194652.73
	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	2006-2018			
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	109.08
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				
5.10 Long-term trend Direction				

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

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)	119.988	
	b) Operator		
	c) Unknown	No	
	d) Method	The FRA is not more than 10% above the current 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	3.435	Maximum	3.435
	b) Area in not-good condition (km²)	Minimum	11.007	Maximum	11.007
	c) Area where condition is not known (km²)	Minimum	94.643	Maximum	94.643
6.2 Condition of habitat Method used	Based mainly on expert opinion with very limited data				
6.3 Short-term trend of habitat area in good condition Period	2005-2018				
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)	M
Modification of hydrological flow or physical alteration of water bodies for agriculture (excluding development and operation of dams) (A33)	M
Problematic native species (I04)	M
Plant and animal diseases, pathogens and pests (I05)	H
Mixed source air pollution, air-borne pollutants (J03)	M
Modification of hydrological flow (K04)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M

Modification of hydrological flow or physical alteration of water bodies for agriculture (excluding development and operation of dams) (A33)	M
Problematic native species (I04)	M
Plant and animal diseases, pathogens and pests (I05)	H
Mixed source air pollution, air-borne pollutants (J03)	M
Modification of hydrological flow (K04)	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

Reduce diffuse pollution to surface or ground waters from agricultural activities (CA11)
Manage drainage and irrigation operations and infrastructures in agriculture (CA15)
Restoration of Annex I forest habitats (CB08)
Management, control or eradication of other invasive alien species (CI03)
Management of problematic native species (CI05)
Reduce impact of mixed source pollution (CJ01)
Reduce impact of multi-purpose hydrological changes (CJ02)
Restore habitats impacted by multi-purpose hydrological changes (CJ03)
Other measures related to natural processes (CL04)

8.6 Additional information

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 Positive - increasing <=1% (one percent or less) per year on average; Future trend of Area is Positive - increasing <=1% (one percent or less) per year on average; and Future trend of Structure and functions is Negative - slight/moderate deterioration

10. Conclusions

10.1. Range: Favourable (FV)

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

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 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.

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 47.897
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	

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

12. Complementary information

12.1 Justification of % thresholds for trends

12.2 Other relevant information

Distribution Map

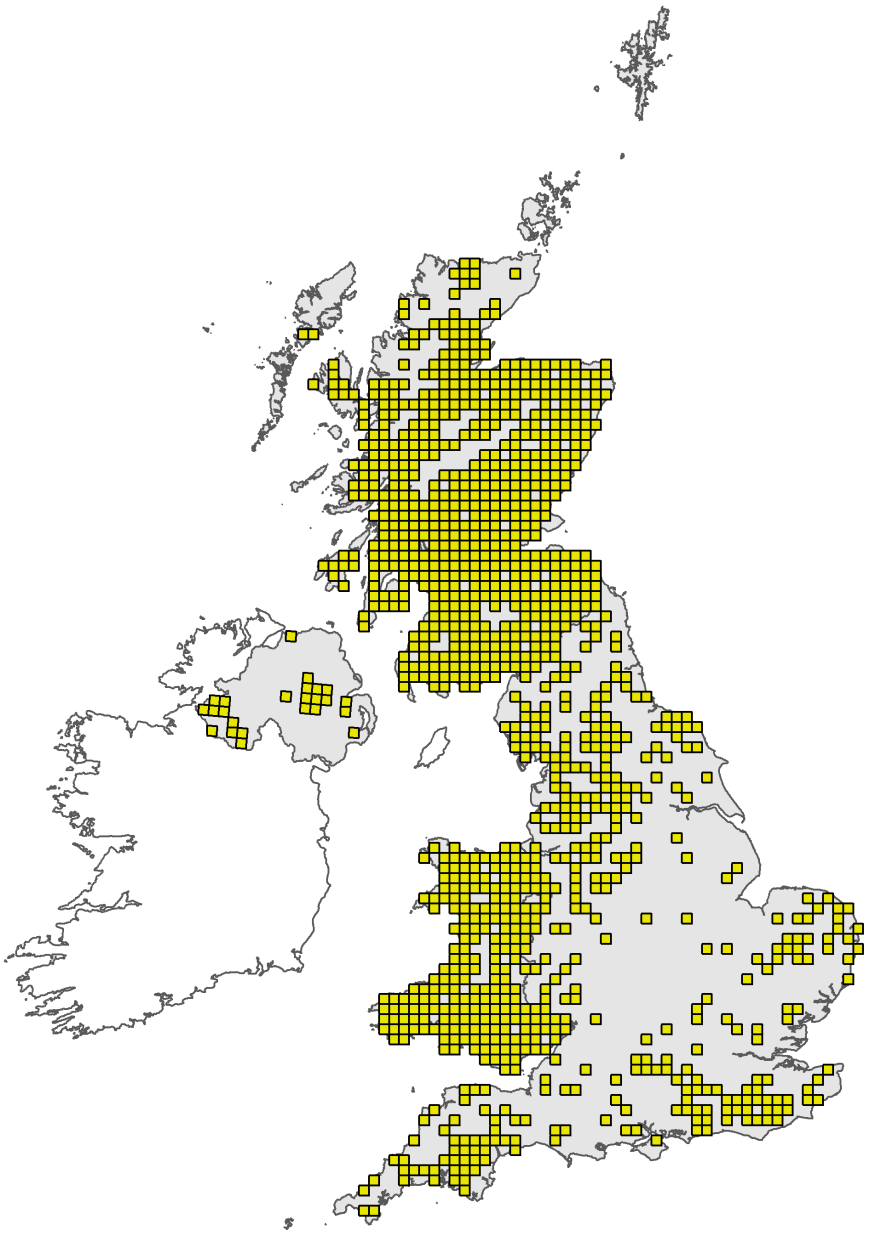

Figure 1: UK distribution map for H91E0 - Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government 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

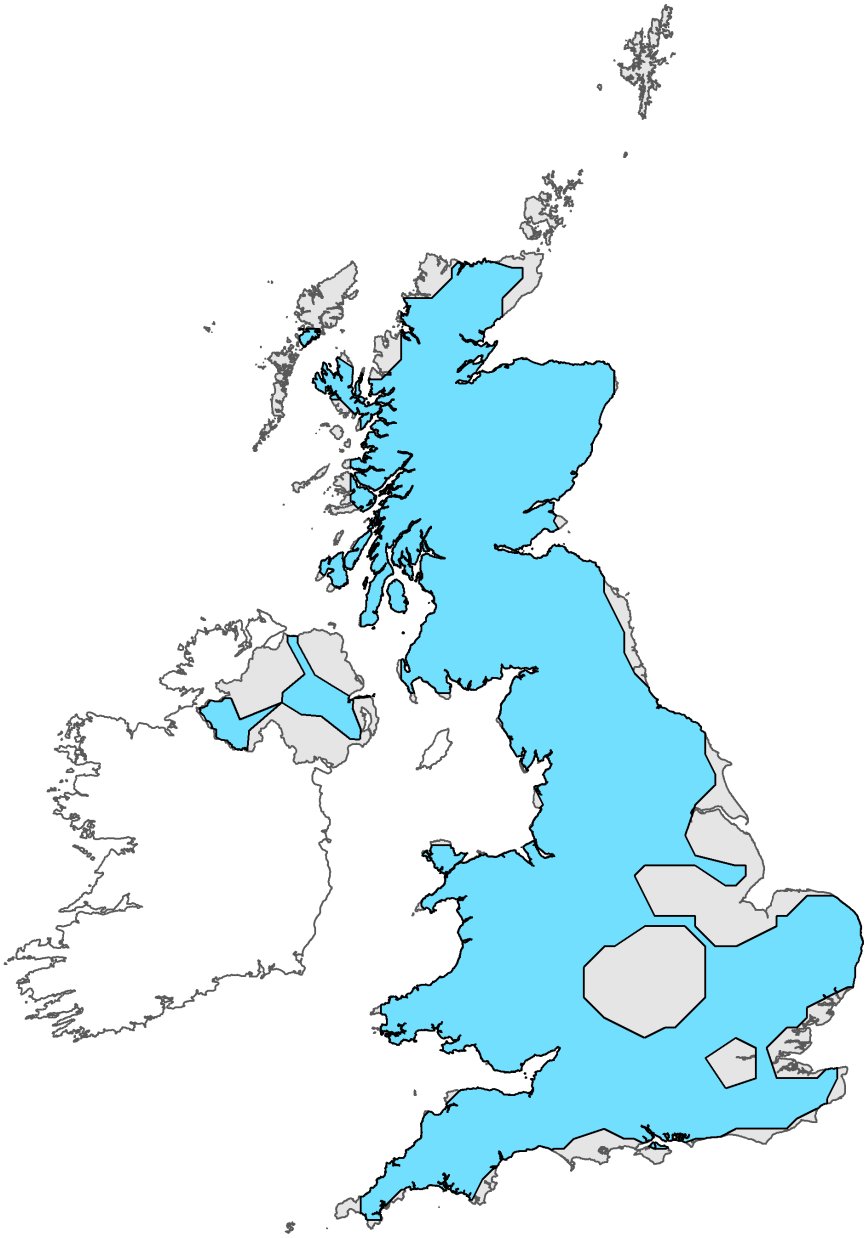

Figure 2: UK range map for H91E0 - Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence 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.