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:

H3110 - Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*)

SCOTLAND

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 (Scotland information only)**
1.2 Habitat code	**3110 - Oligotrophic waters containing very few minerals of sandy plains (Litto**

2. Maps

2.1 Year or period	2007-
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	Previous report SCM Database

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	The range is based upon the estimate used in the previous round. Newly collated vegetation map information (HabMoS) has identified some new potential occurrences of this habitat which did not appear in previous Article 17 reporting distribution maps. However, these have not been ground truthed. Therefore the maps and range submitted for the previous reporting period will be used again.	

5. Area covered by habitat

5.1 Year or period	2007-007-		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value 0.88
5.3 Type of estimate	Best estimate		

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

5.4 Surface area Method used	Based mainly on expert opinion with very limited data		
5.5 Short-term trend Period	2007-2017		
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 extrapolation from a limited amount of 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	Because the area of each loch tends to be relatively stable the area of the habitat closely reflects the number of lochs and in turn the underlying geology. We are not aware of any changes and it is therfore likely that the the Area covered by the habitat remains stable.		

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 0.67	Maximum 0.67
	b) Area in not-good condition (km²)	Minimum 0	Maximum 0
	c) Area where condition is not known (km²)	Minimum	Maximum
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	The one SAC in Scotland for this feature,South Uist Machair was surveyed and found to be in favourable condition in 2016. The area figure is based on the area of lochs listed in the Site account although only 21ha was surveyed.		

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Mixed source pollution to surface and ground waters (limnic	M

and terrestrial) (J01)	
Sports, tourism and leisure activities (F07)	M
Other invasive alien species (other then species of Union concern) (I02)	H

Threat	Ranking
Mixed source pollution to surface and ground waters (limnic and terrestrial) (J01)	M
Sports, tourism and leisure activities (F07)	M
Droughts and decreases in precipitation due to climate change (N02)	M
Other invasive alien species (other then species of Union concern) (I02)	M

7.2 Sources of information	
7.3 Additional information	Increased posphorus levels have been found in one of the S. Uist Lochs. However this is a single measure and therfore not of high confidence and does not yet seem to be affecting condition. Increased run off from storm events are likely to adversely afect the water chemistry of the lochs. Drought conditions may also adversely affect their structure and function Elodea canadensis is in the area though not in any of the monitored lochs.

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	Short-term results (within the current reporting period, 2013-2018)	
8.5 List of main conservation measures		

Reduce impact of mixed source pollution (CJ01)
Adopt climate change mitigation measures (CN01)

8.6 Additional information	The monitored habitat is favourable however there are concerns regarding nutrient inputs and these are being adressed through regulation and agri-environment schemes. Measures regarding INNS would also be desirable however there is no known effective method of control of Elodea canadensis although research continues.

9. Future prospects

9.1 Future prospects of parameters	a) Range b) Area c) Structure and functions
9.2 Additional information	Survey has identified Elodea canadensis in the site although not in the feature. If this spreads it may have an adverse effect which could be difficult to reverse.

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

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 0.67
11.2 Type of estimate	Minimum
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	Based mainly on extrapolation from a limited amount of data
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

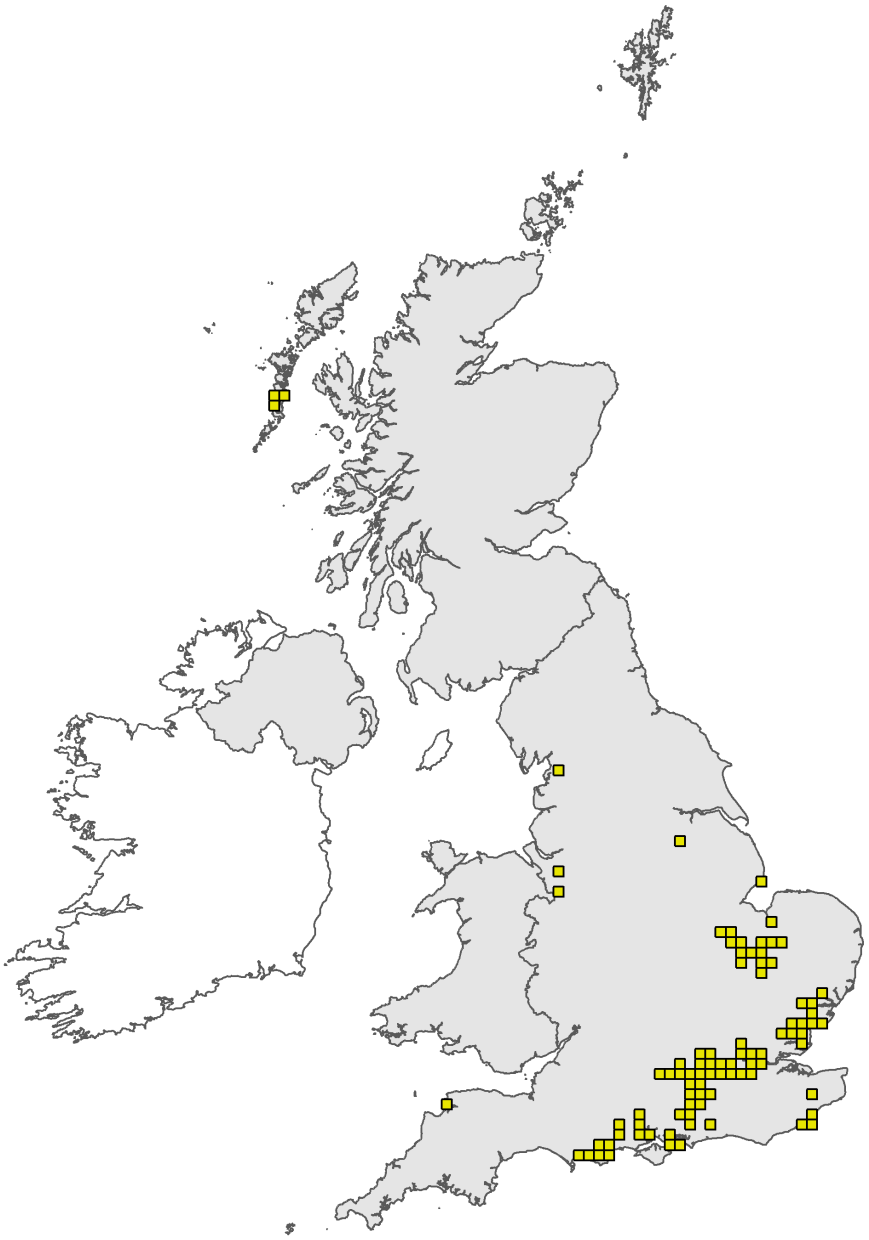

Figure 1: UK distribution map for H3110 - Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). 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 H3110 - Oligotrophic waters containing very few minerals of sandy plains (*Littorelletalia uniflorae*). 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: 3110 Region code: ATL

Field label	Note
5.2c Surface area (in km²) - Best single value	Based on HabMOS best estimate single value