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:

H1310 - *Salicornia* and other annuals colonising mud and sand

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	**1310 - Salicornia and other annuals colonizing mud and sand**
2. Maps	
2.1 Year or period	2010-2013
2.3 Distribution map	Yes
2.3 Distribution map Method used	Complete survey or a statistically robust estimate
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	Haynes, T.A. 2016. Scottish saltmarsh survey national report. Scottish Natural Heritage. Commissioned Report No. 786. https://www.environment.gov.scot/our-environment/habitats-and-species/habitat-map-of-scotland/ Janine M Morris, Site Condition Monitoring of Coastal Habitats. (National Contract, Year 2009-2010) and Site Condition Monitoring of Coastal Habitats (National Contract, Year 2010-2011). Contract No: 25639 http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H1310_SCOTLAND.pdf

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	Improved knowledge/more accurate data	
	The change is mainly due to: Improved knowledge/more accurate data	
4.12 Additional information	Final data has become available from the Saltmarsh Survey of Scotland (2013). This along with other NVC data collated as part of HaBMoS has given an updated and accurate picture of the distribution of this habitat	

5. Area covered by habitat

5.1 Year or period	2010-2013

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5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value	3.29
5.3 Type of estimate	95% confidence interval			
5.4 Surface area Method used	Complete survey or a statistically robust estimate			
5.5 Short-term trend Period	2007-2016			
5.6 Short-term trend Direction	Decreasing (-)			
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	Improved knowledge/more accurate data The change is mainly due to: Improved knowledge/more accurate data			
5.15 Additional information	the Saltmarsh Survey of Scotland was completed in 2013 and has provided comprehensive data on location of Saltmarsh in Scotland. This is the main reason for the difference in extent value from reporting in 2012 (3km2 reported). However this habitat is extremely dynamic and we have evidence of loss of habitat from several sites - particularly replacement by H1330 in the Solway Firth.			

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum 1.48	Maximum 1.48
	b) Area in not-good condition (km²)	Minimum 1.81	Maximum 1.81
	c) Area where condition is not known (km²)	Minimum 0	Maximum 0
6.2 Condition of habitat Method used	Complete survey or a statistically robust estimate		
6.3 Short-term trend of habitat area in good condition Period	2005-2017		
6.4 Short-term trend of habitat area in good condition Direction	Uncertain (u)		
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	

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Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Drainage for use as agricultural land (A31)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M
Sports, tourism and leisure activities (F07)	H
Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08)	H
Other invasive alien species (other then species of Union concern) (I02)	H
Problematic native species (I04)	M
Sea-level and wave exposure changes due to climate change (N04)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	M
Drainage for use as agricultural land (A31)	M
Roads, paths, railroads and related infrastructure (e.g. bridges, viaducts, tunnels) (E01)	M
Sports, tourism and leisure activities (F07)	M
Modification of coastline, estuary and coastal conditions for development, use and protection of residential, commercial, industrial and recreational infrastructure and areas (including sea defences or coastal protection works and infrastructures) (F08)	H
Other invasive alien species (other then species of Union concern) (I02)	H
Problematic native species (I04)	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, 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

Adapt mowing, grazing and other equivalent agricultural activities (CA05)

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Management, control or eradication of other invasive alien species (CI03)

Habitat restoration of areas impacted by residential, commercial, industrial and recreational infrastructure, operations and activities (CF02)

Reduce diffuse pollution to surface or ground waters from agricultural activities (CA11)

Reduce impact of outdoor sports, leisure and recreational activities (CF03)

8.6 Additional information	Measures have been identified both for SSSI's that form part of an SAC and outwith SAC's. Measures include action on diffuse pollution, road tracks and trampling, invasive non-native species and minimisation of overgrazing and coastal defemce works. Most coastal defence structures relate to pre-designation. Some habitat creation has occurred (Eden Estuary)

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 0.9
11.2 Type of estimate	95% confidence interval
11.3 Surface area of the habitat type inside the network Method used	Complete survey or a statistically robust estimate

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11.4 Short-term trend of habitat area in good condition within the network Direction	Decreasing (-)
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

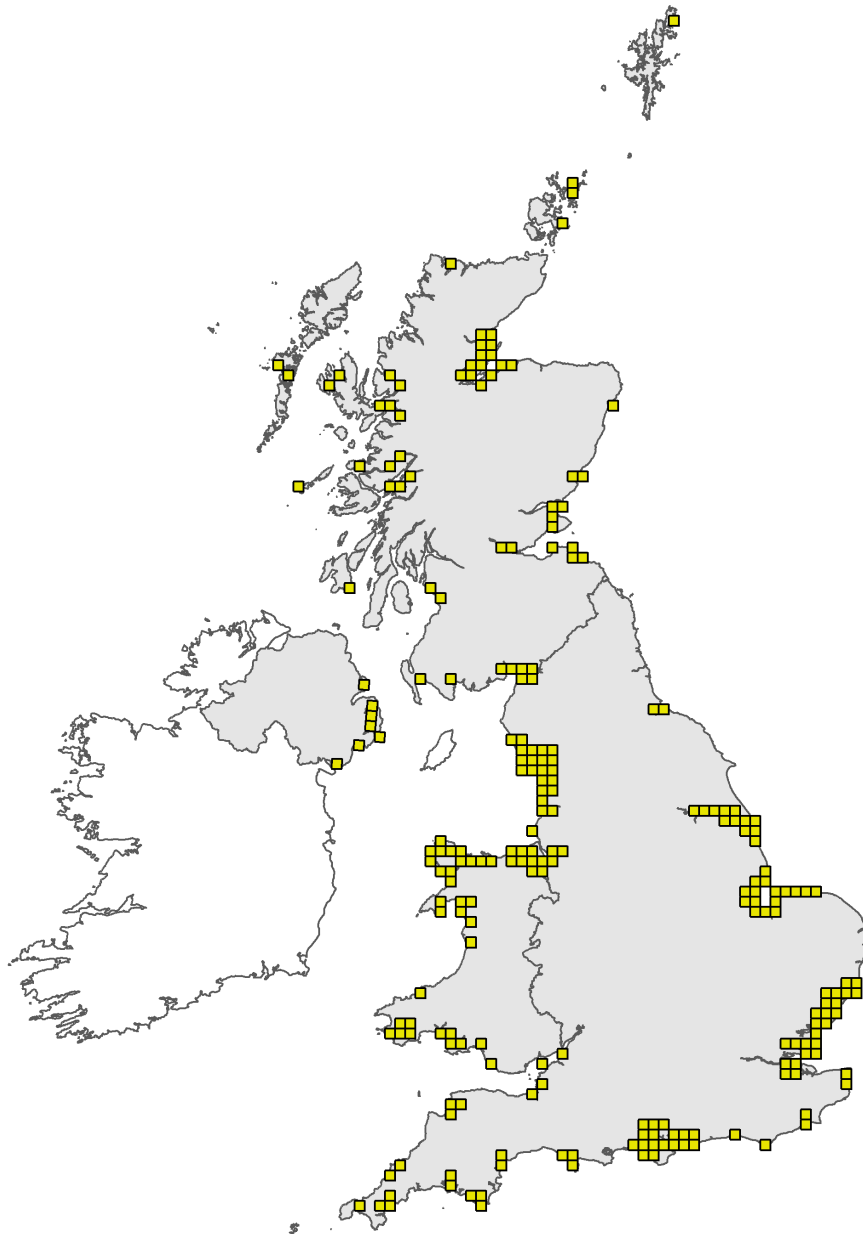|	
12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

Figure 1: UK distribution map for H1310 - *Salicornia* and other annuals colonising mud and sand. 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.
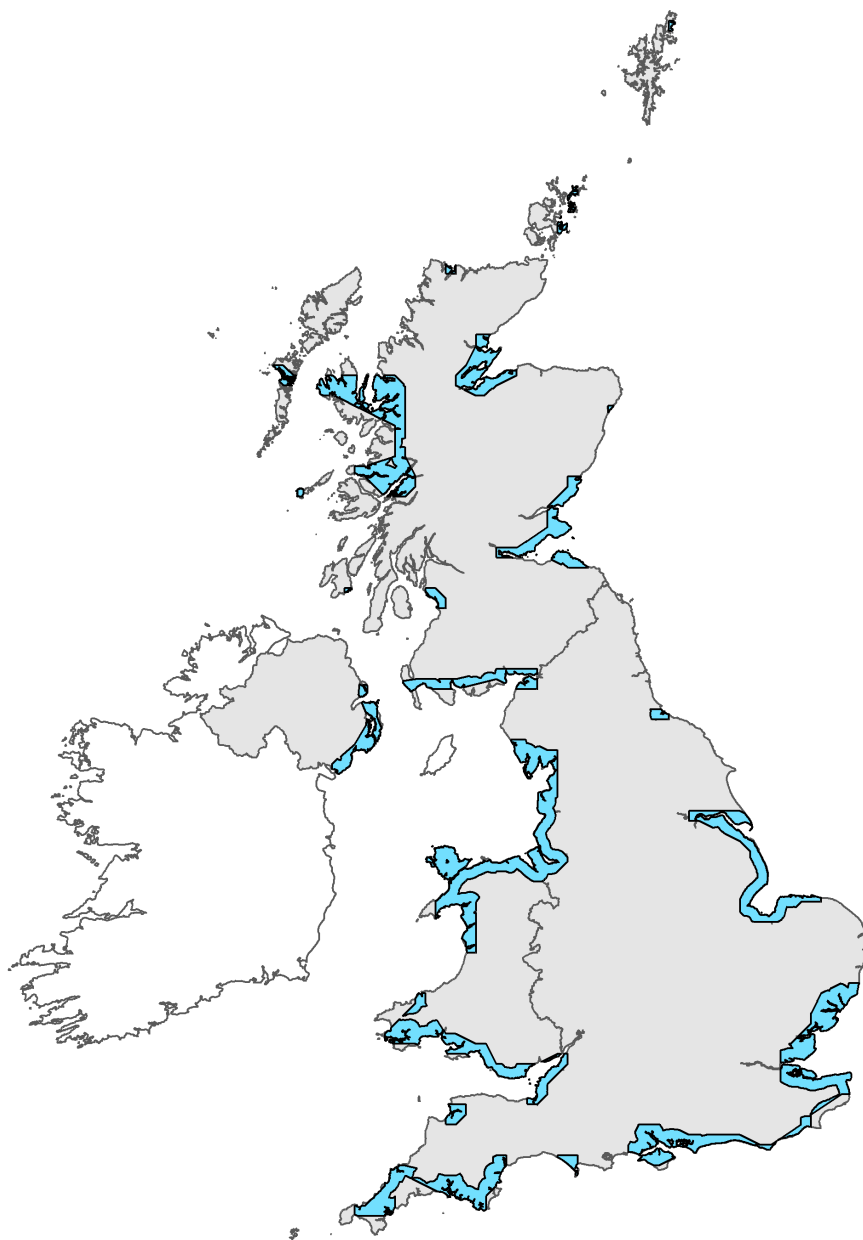
Range Map

Figure 2: UK range map for H1310 - *Salicornia* and other annuals colonising mud and sand. 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.