

**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:

**H1330 - Atlantic salt meadows
(*Glauco-Puccinellietalia maritimae*)**

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 | 1330 - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) |

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 | <p>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/</p> <p>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</p> <p>SNH Site Condition Monitoring results Cycle 3 (from 1 April 2012): see Scotland's environment website. [From the website Detailed tab, select Coastal features by clicking the Feature filter on the left of the screen, then Feature Category= Coast. Data can be exported to spreadsheet by right clicking the table at the bottom of the screen, then Export, then Export Table. Cycle 3 assessments can be seen by filtering the spreadsheet on the 'LatestAssessedSCMcycle' column]. http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H1330_SCOTLAND.pdf</p> |

4. Range

| | |
|--|--|
| 4.1 Surface area (in km ²) | |
| 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 | <p>a) Area (km²)</p> <p>b) Operator</p> <p>c) Unknown No</p> <p>d) Method</p> |
| 4.11 Change and reason for change in surface area of range | <p>Improved knowledge/more accurate data</p> <p>The change is mainly due to: Improved knowledge/more accurate data</p> |

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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 | | |
| 5.2 Surface area (in km ²) | a) Minimum | b) Maximum | c) Best single value 52.94 |
| 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 | Uncertain (u) | | |
| 5.7 Short-term trend Magnitude | a) Minimum | b) Maximum | c) Confidence interval |
| 5.8 Short-term trend Method used | Insufficient or no data available | | |
| 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 (km ²) 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 (21km ² reported). However this habitat is extremely dynamic and we have evidence of both loss of habitat (12 sites were noted to fail targets for maintained extent, such as Kentra Bay) and in some cases increases - H1330 is noted as increasing in extent at the expense of H1310 in Solway saltmarsh and increasing at Morrich More - but we do not have a detailed site based audit of losses and gains. | | |

6. Structure and functions

| | | | |
|--|---|---------------|---------------|
| 6.1 Condition of habitat | a) Area in good condition (km ²) | Minimum 23.29 | Maximum 23.29 |
| | b) Area in not-good condition (km ²) | Minimum 29.64 | Maximum 29.64 |
| | c) Area where condition is not known (km ²) | 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) | | |

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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) | 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 |
| Drainage for use as agricultural land (A31) | H |
| Other invasive alien species (other than species of Union concern) (I02) | M |
| Sports, tourism and leisure activities (F07) | M |
| Deposition and treatment of waste/garbage from household/recreational facilities (F09) | M |
| Agricultural activities generating diffuse pollution to surface or ground waters (A26) | M |
| Sea-level and wave exposure changes due to climate change (N04) | M |
| Change of habitat location, size, and / or quality due to climate change (N05) | M |
| Threat | Ranking |
| Intensive grazing or overgrazing by livestock (A09) | 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 |
| Drainage for use as agricultural land (A31) | H |
| Other invasive alien species (other than species of Union concern) (I02) | M |
| Sports, tourism and leisure activities (F07) | M |
| Deposition and treatment of waste/garbage from household/recreational facilities (F09) | M |
| Agricultural activities generating diffuse pollution to surface or ground waters (A26) | M |
| Sea-level and wave exposure changes due to climate change (N04) | M |

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Change of habitat location, size, and / or quality due to climate change (N05) 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

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

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 defence 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

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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 22

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

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

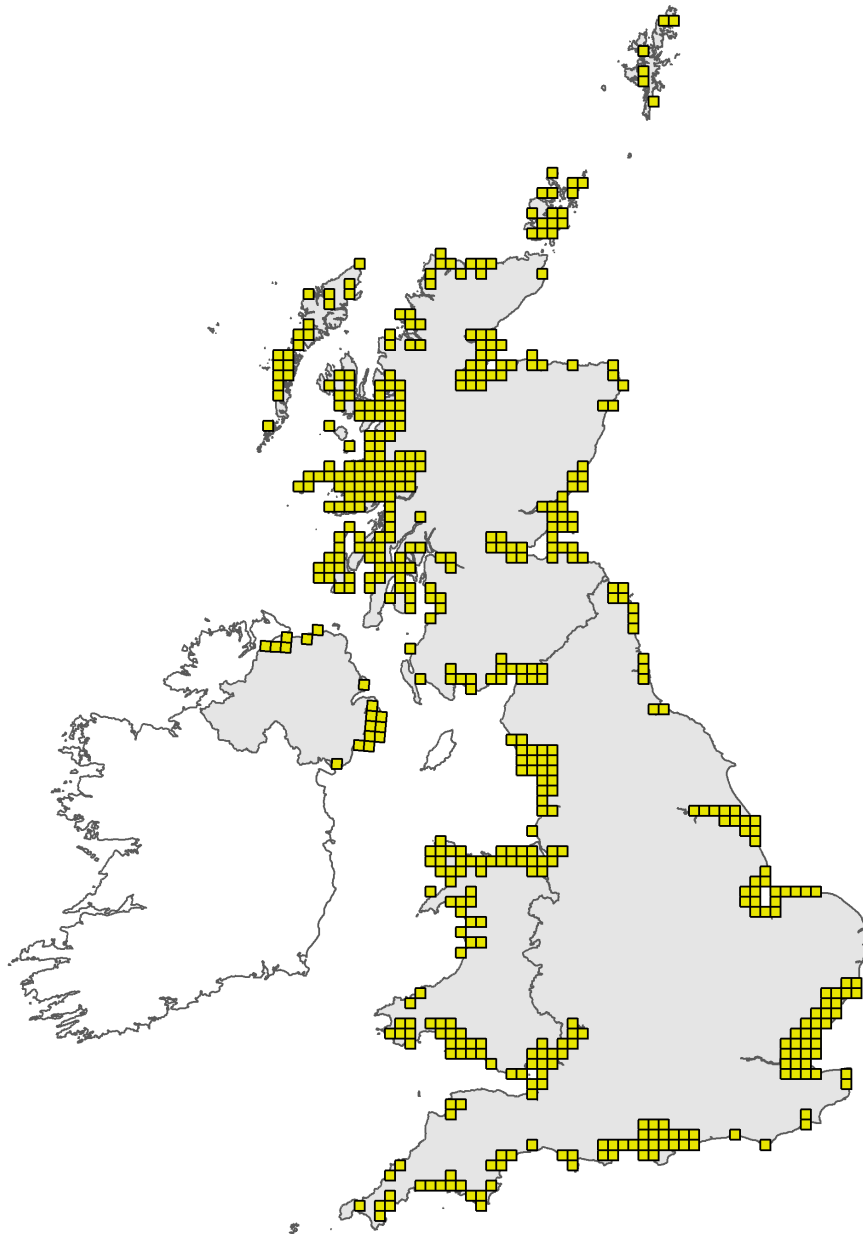


Figure 1: UK distribution map for H1330 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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

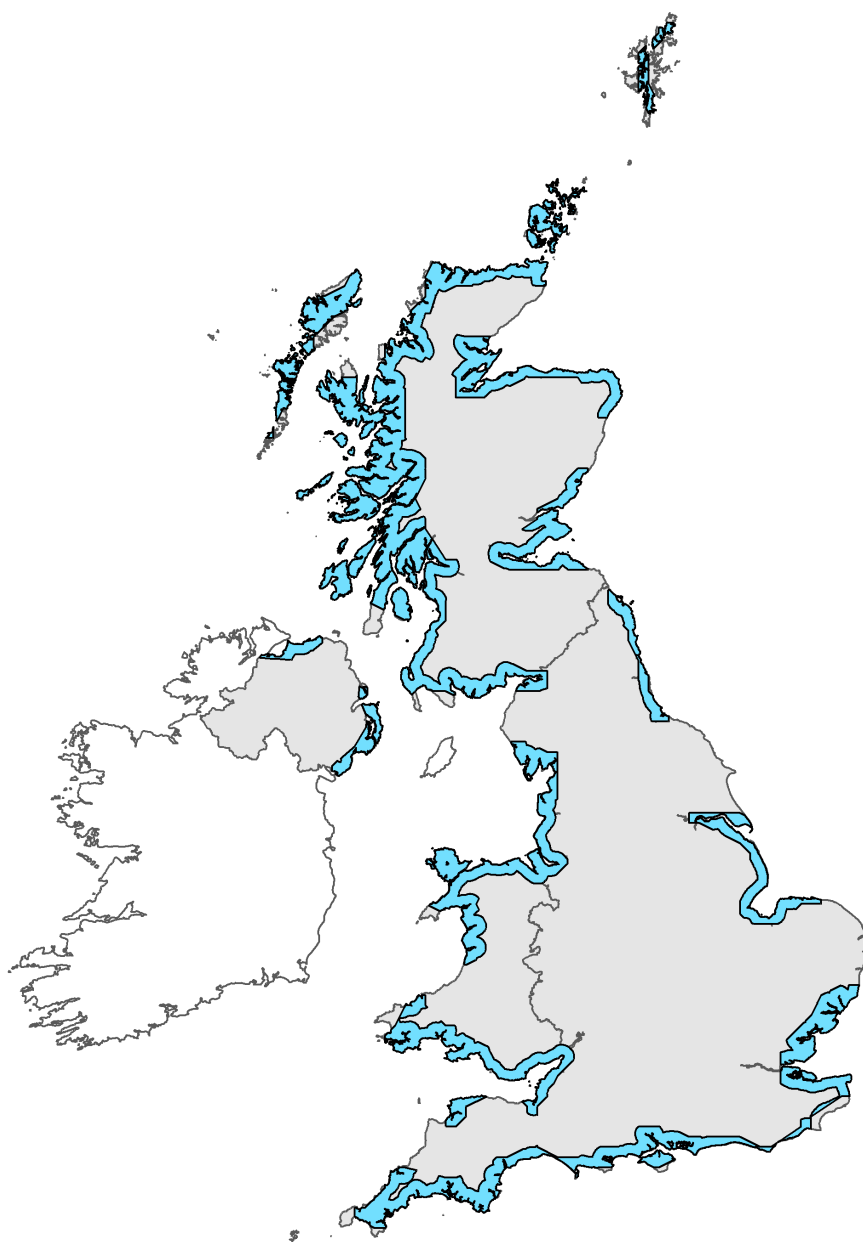


Figure 2: UK range map for H1330 - Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and Gas Authority.

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.