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:

H1420 - Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*)

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	**1420 - Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea**

2. Maps

2.1 Year or period	2003-2013
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	England GARBUTT A., BURDEN A, MASKELL L., SMART S., HUGHES S., NORRIS D., COPPER M. 2015.The status of Habitats Directive Annex I saltmarsh habitats, transition zones and Spartina species in England. Natural England Commissioned Report, NECR185 . Gardiner T., Pilcher R. & Wade M. 2015. Sea Wall Biodiversity Handbook. RPS, Cambridge. http://www.essexfieldclub.org.uk/portal/p/Sea+Wall+Biodiversity+Handbook Natural England. 2015. Coastal management theme plan (IPENSTP019) http://publications.naturalengland.org.uk/publication/6371629661683712?category=5605910663659520 Natural England. 2015. Atmospheric nitrogen theme plan: Developing a strategic approach for England's Natura 2000 sites (IPENSTP013) http://publications.naturalengland.org.uk/publication/6140185886588928?category=5605910663659520 Natural England. 2015.Climate change theme plan: Developing a strategic approach to climate change adaptation (IPENSTP014) http://publications.naturalengland.org.uk/publication/4954594591375360?category=5605910663659520 Natural England. 2015. Coastal management theme plan (IPENS TP019) http://publications.naturalengland.org.uk/publication/6371629661683712?category=5605910663659520 Natural England. 2015. Invasive species theme plan: Strategic principles for the management of invasive species on Natura 2000 sites (IPENSTP020) http://publications.naturalengland.org.uk/publication/6130001713823744?category=5605910663659520 Natural England. 2015.Public access and disturbance theme plan: A strategic approach to identifying and addressing significant effects on the features of Natura 2000 sites (IPENSTP022) http://publications.naturalengland.org.uk/publication/6621454219083776?category=5605910663659520 Natural England. 2015. Improvement Programme for England's Natura 2000 sites (IPENS): Planning for the future Programme Report - a summary of the

programme findings. (NE601). Natural England. http://publications.naturalengland.org.uk/publication/5757712073752576?category=4878851540779008
Jones L, Garbutt A and Angus S. 2013. Impacts of climate change on coastal habitats, MCCIP Science Review, 4 http://www.mccip.org.uk/media/13315/2013arc_backingpapers_18_chab.pdf
JNCC. 2013. Third report by the United Kingdom under article 17 on the implementation of the directive from January 2007 to December 2012. H1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)
Wales
Benoit, P. M. 1961. A note on Salicornia perennis (Perennial Glaswort). Nature in Wales, 7: 21-24.
Boorman, L. 2003. Saltmarsh Review. An overview of coastal saltmarsh, their dynamic and sensitivity characteristics for conservation and management. Report No. 334. Joint Nature Conservation Committee, Peterborough.
Boorman, L.A. and Hazelden, J. 2012. Impacts of additional aerial inputs of nitrogen to saltmarsh and transitional habitats. CCW Science Report No: 995, pp44, Countryside Council for Wales, Bangor, Wales
BRIG. 2007. A preliminary assessment of the implications of climate change for the implementation of the UK BAP targets.
Dargie, T. 1998. NVC survey of saltmarsh habitat in the Severn Estuary. CCW Contract Science Report no. 341.
Dargie, T. 2000. Description of the Severn Estuary survey sectors identified in the 1998 NVC survey. CCW Contract Science Report no. 399.
Dargie, T. 2001. NVC survey of the saltmarsh and other habitats in the Dee and Clwyd estuaries 2000. CCW Contract Science Report no. 450.
Environment Agency 2007. Saltmarsh management manual. R&D Technical Report SC030220.
Evans, F., Clarke, J. 2000. Ty Gwyn Marsh - National Vegetation Classification (NVC) Survey Saltmarsh Survey. NRW Dataset.
JNCC Special Area of Conservation (SAC) Habitat account - Marine, coastal and halophytic habitats: 1420 Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticose). [Online] Available from: http://jncc.defra.gov.uk/protectedsites/sacselection/habitat.asp?FeatureIntCode=H1420
Jones, M.L.M., Angus S., Cooper A., Doody P., Everard M., Garbutt A., Gilchrist P., Hansom G., Nicholls R., Pye K., Ravenscroft N., Rees S., Rhind P. & Whitehouse A. 2011. Coastal margins [chapter 11]. In: UK National Ecosystem Assessment. Understanding nature's value to society. Technical Report. Cambridge, UNEP-WCMC, 411-457.
MarLIN: The Marine Life Information Website: Networkhttps://www.marlin.ac.uk/habitats/detail/25
Prosser, M.V. and Wallace, H.L. 2004. Pen Llyn a'r Sarnau cSAC and adjacent areas saltmarsh review and National Classification survey 2003. CCW Contract Science Report No. 642.
Prosser, M.V. and Wallace, H.L. 1997. Braint Estuary pSAC, NVC survey 1996. CCW NW Area Report 3.
Prosser, M.V. and Wallace, H.L. 1998. Taf, Tywi and Gwendraeth saltmarsh survey (Burry Inlet cSAC), 1997. CCW Contract Science Report No 293.
Prosser, M.V. and Wallace, H.L. 1999a. Burry Inlet and Loughor Estuary SSSI, NVC Survey 1998. CCW Contract Science Report No 376.
Prosser, M.V. and Wallace, H.L. 1999b. Cefni and Aberffraw estuary pSAC: NVC

survey 1998. Countryside Council for Wales, Bangor.
Prosser, M.V. and Wallace, H.L. 2002. National Vegetation Classification Survey: Saltmarshes of the Conwy Estuary. Countryside Council for Wales, Bangor.
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Royal Haskoning. 2012. SMP 21 St Ann's Head to Great Ormes Head (West of Wales) Shoreline Management Plan 2. Available from: http://www.westofwalessmp.org/.
Rhind, P. M. 1995. A review of saltmarsh vegetation surveys in Wales. Countryside Council for Wales, Biological Science Report. Bangor.
Rhind, P.M. 2013. JNCC 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: H1420 - Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)
Rodwell, J. S. et al. 2000. British Plant Communities. volume 5. Maritime Communities and Vegetation of Open Habitats. Cambridge University Press.
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Natural Resources Wales. 2015. Water Watch Wales maps gallery. Cycle 2 waterbodies and rivers. Available from: https://nrw.maps.arcgis.com/apps/webappviewer/index.html?id=2176397a06d64731af8b21fd69a143f6

4. Range

4.1 Surface area (in km²)	2099.24	
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)	2099.24
	b) Operator	
	c) Unknown	No
	d) Method	The FRR is approximately equal to the current range area. 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	No change	
	The change is mainly due to:	
4.12 Additional information		

5. Area covered by habitat

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

5.1 Year or period	2003-2018		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value 1.07
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	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	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	More than (>)	
	c) Unknown	No	
	d) Method	The FRA is not more than 10% above the current area. An FRA operator has been used as it is not clear what the exact area of the FRA is. 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	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	0.02	Maximum	0.02
	b) Area in not-good condition (km²)	Minimum	0.45	Maximum	0.45
	c) Area where condition is not known (km²)	Minimum	0.6	Maximum	0.6
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	2007-2018				
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					

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7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	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)	M
Mixed source air pollution, air-borne pollutants (J03)	M
Sea-level and wave exposure changes due to climate change (N04)	M

Threat	Ranking
Intensive grazing or overgrazing by livestock (A09)	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
Mixed source air pollution, air-borne pollutants (J03)	M
Sea-level and wave exposure changes due to climate change (N04)	H

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)

Manage changes in hydrological and coastal systems and regimes for construction and development (CF10)

Implement climate change adaptation measures (CN02)

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 Overall stable; Future trend of Area is Overall stable; and Future trend of Structure and functions is Negative - slight/moderate deterioration	

10. Conclusions

10.1. Range	Favourable (FV)
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 Improved knowledge/more accurate data Use of different method No information on nature of change The change is mainly due to: Improved knowledge/more accurate data
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 - uncertain. The Overall trend in Conservation Status has changed between 2013 and 2019 because the Area trend has changed from unknown to stable, the Structure and functions trend has changed from increasing to uncertain, and because of the removal of the Future prospects trend from the 2019 method used to assess Overall trend [note that the reason for change is due to less information/accuracy or certainty in the information available].

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

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 1.345
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	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

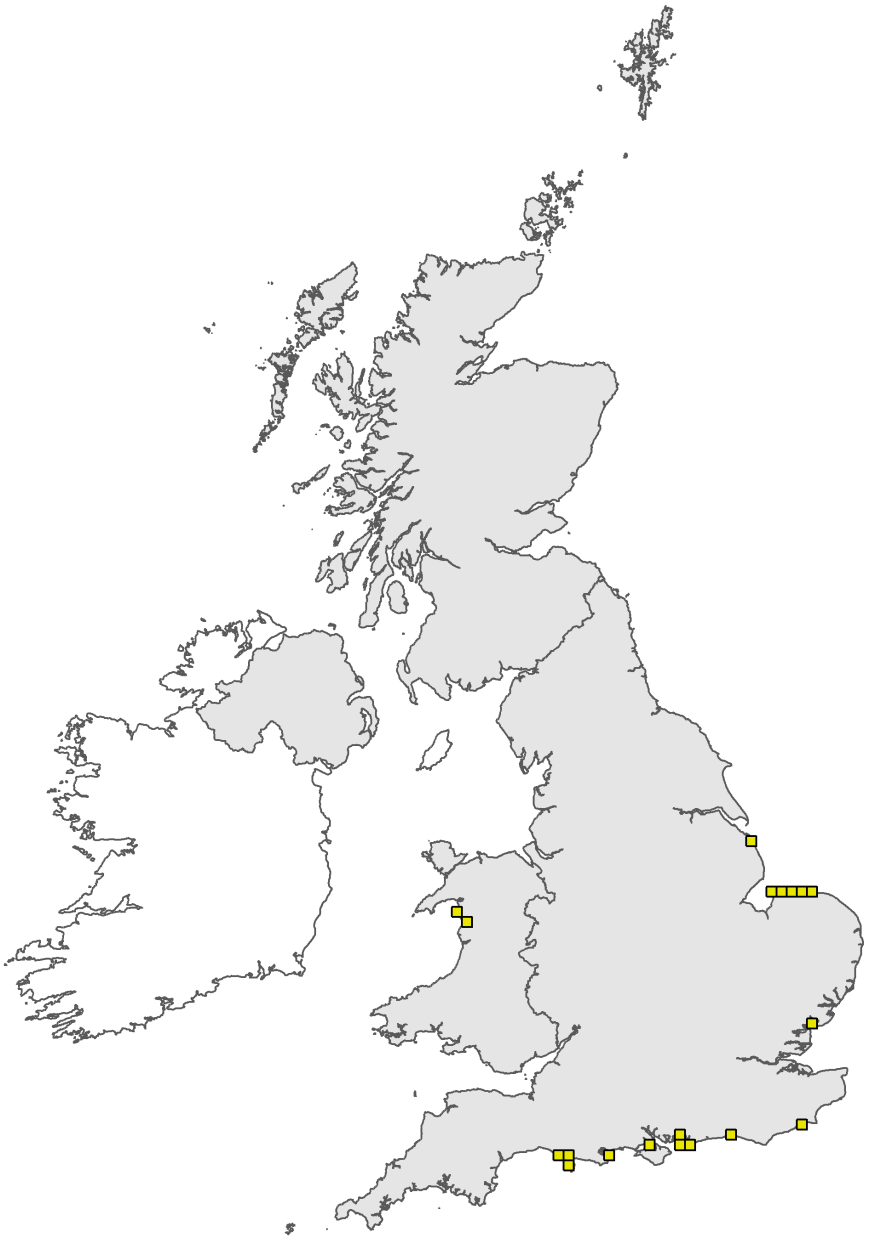

Figure 1: UK distribution map for H1420 - Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 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 H1420 - Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*). 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.