

Report under The Conservation of Habitats and  
Species Regulations 2017 (as amended),  
Regulation 9A

**2019-2024**

Conservation status assessment for the habitat:

**H8220 - Siliceous rocky slopes with  
chasmophytic vegetation**

**Wales**



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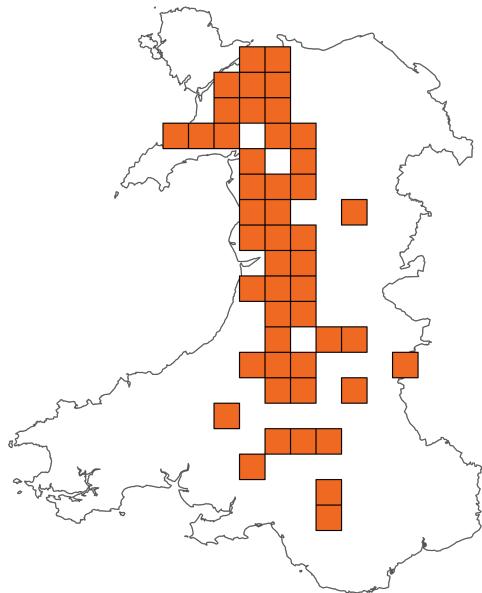
### **Important note - Please read**

- The information in this document represents Wales Report under The Conservation of Habitats and Species Regulations 2017 (as amended), Regulation 9A, for the period 2019-2024.
- It is based on supporting information provided by Natural Resources Wales, which is documented separately.
- The Habitats Regulations reporting 2019-2024 Approach Document provides details on how this supporting information contributed to the UK Report and the fields that were completed for each parameter.
- Maps showing the distribution and range of the habitat are included.
- Explanatory notes (where provided) are included at the end. These provide additional audit trail information to that included within the assessments. Further underpinning explanatory notes are available in the related country reports.
- 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 not relevant to this habitat (section 11 National Site Network coverage for Annex I habitats).

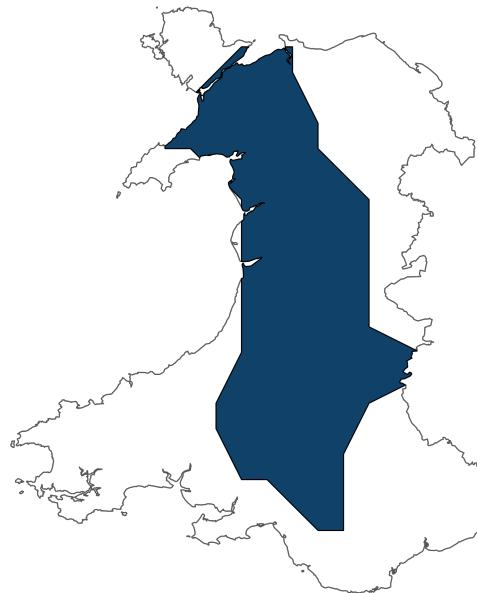
Further details on the approach to the Habitats Regulations Reporting 2019-2024 are available on the [JNCC website](#).

## Assessment Summary: Siliceous rocky slopes with chasmophytic vegetation

### Distribution Map



### Range Map



**Figure 1:** Wales distribution and range map for H8220 - Siliceous rocky slopes with chasmophytic vegetation. 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 within the current reporting period.

**Table 1:** Table summarising the conservation status for H8220 - Siliceous rocky slopes with chasmophytic vegetation. Overall conservation status for habitat is based on assessments of range, area covered by habitat, structure and functions, and future prospects.

### Overall Conservation Status (see section 10)

**Unfavourable-bad (U2)**

### Breakdown of Overall Conservation Status

Range (see section 4)	Unknown (XX)
Area covered by habitat (see section 5)	Unknown (XX)
Structure and functions (see section 6)	<b>Unfavourable-bad (U2)</b>
Future prospects (see section 9)	Unknown (XX)

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## National Level

### 1. General information

<b>1.1 Country</b>	Wales
<b>1.2 Habitat code</b>	H8220 - Siliceous rocky slopes with chasmophytic vegetation

### 2. Maps

<b>2.1 Year or period</b>	1987-2012
<b>2.2 Distribution map</b>	Yes
<b>2.3 Distribution map; Method used</b>	Based mainly on extrapolation from a limited amount of data

### 2.4 Additional information

No additional information

## Biogeographical Level

### 3. Biogeographical and marine regions

<b>3.1 Biogeographical or marine region where the habitat occurs</b>	ATL
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### 3.2 Sources of information

See section 13 References

### 4. Range

<b>4.1 Surface area (km<sup>2</sup>)</b>	8,746.61
<b>4.2 Short-term trend; Period</b>	
<b>4.3 Short-term trend; Direction</b>	Unknown
<b>4.4 Short-term trend; Magnitude</b>	

a) Estimated minimum

b) Estimated maximum

c) Pre-defined range

d) Unknown

e) Type of estimate

f) Rate of decrease

4.5 Short-term trend; Method used

Insufficient or no data available

4.6 Long-term trend; Period

4.7 Long-term trend; Direction

4.8 Long-term trend;

Magnitude

a) Minimum

b) Maximum

c) Rate of decrease

4.9 Long-term trend; Method used

4.10 Favourable Reference Range (FRR)

a) Area (km<sup>2</sup>)

b) Pre-defined increment

Current range is less than 2% smaller than the FRR

c) Unknown

No

d) Method used

Reference-based approach

e) Quality of information

moderate

4.11 Change and reason for change in surface area of range

a) Change

No

b) Genuine change

c) Improved knowledge or more accurate data

d) Different method

e) No information

f) Other reason

g) Main reason

#### 4.12 Additional information

No additional information

### 5. Area covered by habitat

5.1 Year or period 1979-1997

5.2 Surface area (km<sup>2</sup>)

a) Minimum

b) Maximum

c) Best single value 12

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

5.6 Short-term trend; Direction Unknown

5.7 Short-term trend;  
Magnitude

a) Estimated minimum

b) Estimated maximum

c) Pre-defined range

d) Unknown

e) Type of estimate

f) Rate of decrease

5.8 Short-term trend; Method used Insufficient or no data available

**5.9 Long-term trend; Period**

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**5.10 Long-term trend;  
Direction**

**5.11 Long-term trend;  
Magnitude**

**a) Minimum**

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**b) Maximum**

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**c) Confidence interval**

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**d) Rate of decrease**

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**5.12 Long-term trend; Method  
used**

**5.13 Favourable Reference  
Area (FRA)**

**a) Area (km<sup>2</sup>)**

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**b) Pre-defined increment** Current area is less than 2% smaller than the FRA

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**c) Unknown** No

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**d) Method used** Reference-based approach

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**e) Quality of information** moderate

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**5.14 Change and reason for change in surface area of range**

**a) Change** No

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**b) Genuine change**

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**c) Improved knowledge or  
more accurate data**

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**d) Different method**

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**e) No information**

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**f) Other reason**

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**g) Main reason**

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**5.15 Additional information**

No additional information

## 6. Structure and functions

### 6.1 Condition of habitat (km<sup>2</sup>)

#### Area in good condition

**ai) Minimum** 0.64

**aii) Maximum** 0.64

#### Area not in good condition

**bi) Minimum** 3.05

**bii) Maximum** 3.05

#### Area where condition is unknown

**ci) Minimum** 8.31

**cii) Maximum** 8.31

**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

**6.4 Short-term trend of habitat area in good condition; Direction** Unknown

**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

Typical species were not used directly in the assessment of conservation status for habitat structure and function as a comprehensive list of typical species for each habitat was not available. However, the status of typical species was considered when the

condition of individual sites was assessed using Common Standards Monitoring Guidance. Common Standards Monitoring (CSM) data was used to assess the area of habitat in 'good' and 'not good' condition (field 6.1). Species were a component of the attributes assessed under CSM. Therefore, an assessment of species is considered to have formed part of the reporting under field 6.1 which supported the Habitats Structure and Function assessment (field 10.3).

## 7. Main pressures

### 7.1 Characterisation of pressures

**Table 2:** Pressures affecting the habitat, including timing and importance/impact ranking. Pressures are defined as factors acting currently and/or during the reporting period (2019–2024). Rankings are: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Pressure	Timing	Ranking
PA07: Intensive grazing or overgrazing by livestock	Ongoing and likely to be in the future	High (H)
PF05: Sports, tourism and leisure activities	Ongoing and likely to be in the future	High (H)
PI02: Other invasive alien species (other than species of Union concern)	Ongoing and likely to be in the future	Medium (M)
PI03: Problematic native species	Ongoing and likely to be in the future	High (H)
PK03: Mixed source air pollution, air-borne pollutants	Ongoing and likely to be in the future	High (H)
PK04: Atmospheric N-deposition	Ongoing and likely to be in the future	High (H)
PM07: Natural processes without direct or indirect influence from human activities or climate change	Ongoing and likely to be in the future	High (H)
PJ10: Change of habitat location, size, and / or quality due to climate change	Only in future	Medium (M)

### 7.2 Sources of information

See section 13 References

### 7.3 Additional information

No 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
<b>8.2 Main purpose of the measures taken</b>	
<b>8.3 Location of the measures taken</b>	
<b>8.4 Response to measures</b>	

### 8.5 List of main conservation measures

**Table 3:** Key conservation measures addressing current pressures and/or anticipated threats during the next two reporting periods (2025–2036). Measures are ranked by importance/impact: High (direct/immediate influence and/or large spatial extent) and Medium (moderate direct/immediate influence, mainly indirect and/or regional extent).

Conservation measure	Ranking
MA05: Adapt mowing, grazing and other equivalent agricultural activities (e.g. burning)	High (H)
MF03: Reduce impact of outdoor sports, leisure and recreational activities (incl. restoration of habitats)	High (H)
MI03: Management, control or eradication of other invasive alien species	Medium (M)
MI05: Management of problematic native species	High (H)
MK01: Reduce impact of mixed source pollution	High (H)

### 8.6 Additional information

No additional information

## 9. Future prospects

### 9.1a Future trends of parameters

<b>ai) Range</b>	Unknown
<b>bi) Area</b>	Unknown
<b>ci) Structure and functions</b>	Unknown

### 9.1b Future prospects of parameters

<b>a(ii) Range</b>	Unknown
<b>b(ii) Area</b>	Unknown
<b>c(ii) Structure and functions</b>	Unknown

### 9.2 Additional information

No additional information

## 10. Conclusions

<b>10.1 Range</b>	Unknown (XX)
<b>10.2 Area</b>	Unknown (XX)
<b>10.3 Specific structure and functions (incl. typical species)</b>	Unfavourable-bad (U2)
<b>10.4 Future prospects</b>	Unknown (XX)
<b>10.5 Overall assessment of Conservation Status</b>	Unfavourable-bad (U2)
<b>10.6 Overall trend in Conservation Status</b>	Unknown

### 10.7 Change and reason for change in conservation status

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

### 10.7 Change and reason for change in conservation status trend

This field is not reported as the period 2019-2024 marks the first instance in which conservation status has been assessed at the national level, meaning no comparisons to previous reports can be drawn.

## 10.8 Additional information

No additional information

## 11. UK National Site Network (pSCIs, SCIs, SACs) coverage for Annex I habitat types

### 11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (km<sup>2</sup>)

#### a) Minimum

#### b) Maximum

c) Best single value 3.69

11.2 Type of estimate Best estimate

11.3 Habitat area inside the network; Method used Based mainly on extrapolation from a limited amount of data

11.4 Short-term trend of habitat area within the network; Direction Unknown

11.5 Short-term trend of habitat area within the network; Method used Insufficient or no data available

11.6 Short-term trend of habitat area in good condition within the network; Direction Unknown

11.7 Short-term trend of habitat area in good condition within the network; Method used Insufficient or no data available

### 11.8 Additional information

No additional information

## 12. Complementary information

### 12.1 Justification of percentage thresholds for trends

No justification information

## **12.2 Other relevant information**

No other relevant information

## 13. References

### Biogeographical and marine regions

#### 3.2 Sources of information

Blackstock, T.H., Howe, E.A., Stevens, J.P., Burrows, C. R., and P.S Jones. 2010. Habitats of Wales. University of Wales Press, Cardiff.

Wareham, D. 2003. The effects of the feral goat (*Capra hircus* L.) on the upland vegetation of Cwm Idwal NNR and the Tryfan area of Snowdonia, summer 2002. CCW Science Report No: 567.

Wales Audit Office. 2012. Annual Improvement Report Snowdonia National Park Authority.

Stevens, J., Sherry J. and A Turner. 2012. H8220 Siliceous Rocky Slopes with Chasmophytic Vegetation Inventory.

Preston, C.D., Pearman, D.A., & Dines, T.D. 2002. New atlas of the British and Irish flora: an atlas of the vascular plants of Britain, Ireland, the Isle of Man and the Channel Islands. Oxford University Press, Oxford.

Natural Resources Wales. 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 Habitats: H8220 -Siliceous rocky slopes with Chasmophytic vegetation. Available from: [https://webarchive.nationalarchives.gov.uk/ukgwa/20180804112107mp\\_/http://jncc.defra.gov.uk/pdf/Article17Consult\\_20131010/H8220\\_WALES.pdf](https://webarchive.nationalarchives.gov.uk/ukgwa/20180804112107mp_/http://jncc.defra.gov.uk/pdf/Article17Consult_20131010/H8220_WALES.pdf)

Guest, D. 2012. Assessing pressures and threats for article 17 reporting based on information in CCW's Actions Database. CCW HQ internal document.

British Mountaineering Council (BMC). 2010. Winter climbing: conservation impact. Available from: <https://www.thebmc.co.uk/winter-climbing-conservation-impact> [Accessed 8th June 2018]

### Main pressures

#### 7.2 Sources of information

No sources of information

## 14. Explanatory Notes

Field label	Note
2.3: Distribution map; Method used	The distribution of H8220 was predicted based on records for the following key species: <i>Asplenium septentrionale</i> , <i>Asplenium trichomanes</i> subsp. <i>trichomanes</i> and <i>Cerastium arcticum</i> . 10km square records for these species were derived from the atlas of the British and Irish flora (Preston et al 2002) and used to produce a 10km square GIS Inventory (Stevens, Sherry and Turner 2012). This is considered only a partial data set and further work is required to confirm the location and extent of the habitat. In particular little attention has been paid to the lowland examples.
4.11: Change and reason for change in surface area of range	There has been no change to the 10km square records for this habitat since the 2013 report. Changes in surface area or range may actually have occurred since the last reporting period, but NRW has no system in place for monitoring or recording such changes.
5.4: Surface area; Method used	The Annex 1 habitat has not been specifically mapped and no reliable figure for extent is available. Phase 1 Habitat Survey of Wales 1979-1997 (Blackstock et al. 2010) gives a figure for acid/neutral natural inland cliffs of 1,200 ha (roughly 220 ha in the lowlands and 970 ha in the uplands). This vegetation will include types which do not conform to the Annex 1 habitat description and this figure can be viewed as a maximum extent (although in this context it is worth noting that the Phase 1 area measurements are based on a vertical projection and hence significantly under-represent these cliff and slope habitats).
5.6: Short-term trend; Direction	No evidence is available with which to determine trend direction for surface area in the long or short term.
6.1: Condition of habitat	Assessment of structure and function within SACs is based on the results of common standards monitoring visits undertaken between 2007 and 2012. No information on species composition is available for siliceous chasmophytic vegetation in the SAC data. Grazing, scrub and bracken

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	<p>invasion, the presence of invasive non-native species and erosion due to livestock or human access all have a negative impact on the structure of the vegetation across the SAC series. However, there are sections of cliff in Eryri and Cadair Idris where SAC monitoring has shown that the vegetation structure is favourable.</p>
<p><b>6.2: Condition of habitat; Method used</b></p>	<p>Data on the extent of habitat in good and not good condition was derived from NRW's SAC monitoring programme. The condition of the habitat was assessed on the three SACs on which the habitat is a recognised (A-C grade) feature. Features assessed as being in favourable condition were considered to be entirely in 'good condition' and those assessed as being in unfavourable were considered to be in entirely in 'not good-condition'. Area estimates for this habitat are unreliable, with uncertainty and inconsistencies associated with figures for both individual sites and Wales as a whole (see sections 5.4 and 11.1).</p>
<p><b>7.1: Characterisation of pressures</b></p>	<p>The data held in the 'Actions Database' were used to provide a basis for quantifying pressures/threats relating to the H8220 habitat. The 'Actions Database' provides information on pressures within the protected sites series; this was then matched to an expert judgement on the severity of these pressures/threats (at a generic level) to give an overall evaluation of the pressure/threat level (for more details see Guest, 2012). Additional information on pressures was drawn from SAC monitoring reports (2007-2012). The potential impacts of atmospheric nitrogen on this habitat are unclear and no generic critical load range has been agreed. Assessment of the 10km data for the habitat against the 2009 CEH moorland deposition data, shows an average of 17kg/N/ha/yr with no areas receiving less than 7kg/N/ha/yr therefore there is potential for significant impacts.</p>

Only one pressure was identified by the Actions Database as having a high impact; PF05 Outdoor sports and leisure activities – impacts of cliff climbing and ice climbing. SAC

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Monitoring on Eryri, Cadair Idris and Brecon Beacons identifies the same pressures on the H8220 as on H8210; PA07 Overgrazing, PI03 invasive non-native species, PI02 problematic native species and PM07 natural succession.

PA07 Overgrazing – where cliffs are accessible SAC monitoring on Eryri found areas where more than 50% of the annual growth was removed through grazing. Sheep were also noted on the cliffs of Craig Cerrig Gleisiad in the Brecon Beacons. PI03 problematic native species and PM07 natural succession relate to the spread of bracken and scrub respectively. The invasion of bracken and scrub is not uniform and appears to be a problem in some compartments. PI02 invasive non-native species – *Epilobium brunnescens* is recorded as present on Eryri and Cader Idris and conifer seedlings were found at the latter site. PK03 & PK04 Air pollution is likely to have a similar impact as on other rock and scree habitats with lichens, bryophyte and fern species being potentially vulnerable to nitrogen impacts.

#### Threats:

All of the pressures listed in above were considered to be ongoing with no reason to suppose they will not continue to be applicable over the next two reporting cycles.

PA07 Grazing remains a threat on accessible cliffs. Feral goats pose an additional threat in Eryri. A study in 2003 suggested that goats were not having a significant impact on the cliff vegetation (Wareham 2003), however grazing noted during the recent SAC monitoring could not be attributed to sheep alone. With decreasing sheep numbers goat populations may expand.

PK03 &PK04 the impacts of nitrogen on vegetation may continue even with a decline in atmospheric deposition. PM07 and PI03 scrub and bracken control will remain an issue and may become an increasing threat if grazing

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pressures become too low.

PF05 Visitor pressure has continued to rise in recent years with an 18% increase in number walkers on the footpaths of Snowdon between 2009/10 and 2010/2011 (Wales Audit Office 2012). It is highly likely recreational pressure on siliceous rocky slopes will, at the least, remain the same but could continue to increase.

PI02 Invasive non-natives such as conifers and potentially rhododendron in Eryri pose a threat for the future. N05: the potential impacts of climate change on this habitat are unclear but upland species found in several Welsh vegetation stands at the southern edge of their distribution are likely to be most sensitive.

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8.1: Status of measures	While the majority of the most important measures required to restore/maintain this habitat to FCS in Wales have been identified, the bulk have not yet been fully implemented.
8.5: List of main conservation measures	MA05 Maintaining appropriate grazing through agreement (no specific agreements for Chasmophytic but removal/reduction of grazing levels in areas such as Cwm Idwal will benefit the habitat).
	MI05 Management of problematic native species (e.g. bracken).
	MI03 Management of invasive non-natives (e.g. <i>Epilobium brunescens</i> ) and feral goat population e.g. strategic approach of Feral Goat Group.
	MF03 Management of recreational activities including publicity/voluntary agreements to prevent damage by rock climbing and ice climbing e.g. Cwm Idwal ice climbing (BMC, 2010).

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	MK01 Reduce deposition of nitrogen and other airborne pollutants on the habitat. Monitor impacts of nitrogen deposition to improve understanding of impacts and targeting measures.
9.1: Future trends and prospects of parameters	<p>9.1a - NRW currently lacks a specialist covering this habitat and as such we are unable to predict the likely trend in the range of this habitat over the next twelve years.</p> <p>9.1b - NRW currently lacks a specialist covering this habitat and as such we are unable to predict the likely trend in the area of this habitat over the next twelve years.</p> <p>9.1c - NRW currently lacks a specialist covering this habitat and as such we are unable to predict the likely trend in the structure and function of this habitat over the next twelve years.</p>
10.1: Range	Conclusion on Range reached because: (i) the short-term trend direction in Range surface area is unknown; and (ii) the current Range surface area is approximately equal to the Favourable Reference Range.
10.2: Area	Conclusion on Area reached because: (i) the short-term trend direction in Area is unknown; (ii) the current Area is approximately equal to the Favourable Reference Area; and (iii) the change in distribution pattern is unknown.
10.3: Specific structure and functions	Conclusion on Structure and function reached because: i) habitat condition data indicates that more than 25% of the habitat is in unfavourable (not good) condition; ii) short-term trend in area of habitat in good condition is unknown; and iii) expert opinion determines that although there are no significant issues for this habitat, as the short-term trend in area of habitat in good condition is unknown then this habitat should be considered as unfavourable-bad under the precautionary principle.
10.4: Future prospects	Conclusion on Future prospects reached because: (i) the Future prospects for Range are unknown; (ii) the Future prospects for Area covered by habitat are unknown; and (iii)

	the Future prospects for Structure and function are unknown.
10.5: Overall assessment of Conservation Status	Overall assessment of Conservation Status is Unfavourable-bad because one or more of the conclusions are Unfavourable-bad.
5.13: Favourable Reference Area (FRA)	The UK-level FRV for surface area was developed by JNCC using an audit trail based on the year the FRV was first established and any changes made in subsequent reporting rounds. The audit may draw from any combination of the 2007, 2013, or 2019 Habitats Directive reports and reflects the full rationale used for the 2019 Article 17 reporting. This FRV was reviewed by Welsh experts and considered appropriate for use in Wales based on current habitat extent and trends.
4.10: Favourable Reference Range (FRR)	The UK-level FRV for range was developed by JNCC using an audit trail based on the year the FRV was first established and any changes made in subsequent reporting rounds. The audit may draw from any combination of the 2007, 2013, or 2019 Habitats Directive reports and reflects the full rationale used for the 2019 Article 17 reporting. This FRV was reviewed by Welsh experts and considered appropriate for use in Wales based on current distribution and trends.