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

2019-2024

Conservation status assessment for the habitat:

H1230 - Vegetated sea cliffs of the Atlantic and Baltic coasts

Wales

Cyfoeth Naturiol Cymru
Natural Resources Wales

JNCC

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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: Vegetated sea cliffs of the Atlantic and Baltic coasts

Distribution Map

Range Map

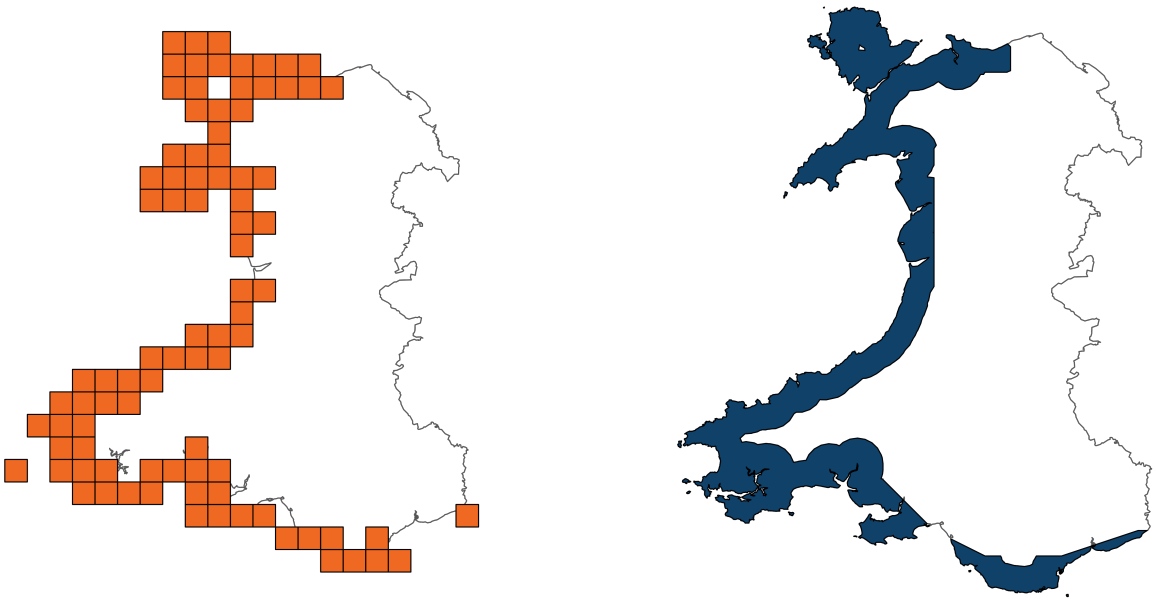

Figure 1: Wales distribution and range map for H1230 - Vegetated sea cliffs of the Atlantic and Baltic coasts. Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government Licence v3 (OGL). Contains data © 2017 Oil and 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 H1230 - Vegetated sea cliffs of the Atlantic and Baltic coasts. 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)	**Favourable (FV)**
Area covered by habitat (see section 5)	**Unfavourable-inadequate (U1)**
Structure and functions (see section 6)	**Unknown (XX)**
Future prospects (see section 9)	**Unfavourable-bad (U2)**

List of Sections

National Level

1. General information

1.1 Country	Wales
1.2 Habitat code	H1230 - Vegetated sea cliffs of the Atlantic and Baltic coasts

2. Maps

2.1 Year or period	2019-2024
2.2 Distribution map	Yes
2.3 Distribution map; Method used	Complete survey or a statistically robust estimate

2.4 Additional information

No additional information

Biogeographical Level

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs ATL

3.2 Sources of information

See section 13 References

4. Range

4.1 Surface area (km²)	6,121.26
4.2 Short-term trend; Period	2013-2024
4.3 Short-term trend; Direction	Stable
4.4 Short-term trend; Magnitude	

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	Complete survey or a statistically robust estimate
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 (km²)	
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	1987-2024
5.2 Surface area (km²)	
a) Minimum	
b) Maximum	
c) Best single value	31.13
5.3 Type of estimate	Best estimate
5.4 Surface area; Method used	Complete survey or a statistically robust estimate
5.5 Short-term trend; Period	2018-2024
5.6 Short-term trend; Direction	Decreasing
5.7 Short-term trend; Magnitude	
a) Estimated minimum	
b) Estimated maximum	
c) Pre-defined range	Decreasing 0 - 12%
d) Unknown	No
e) Type of estimate	Pre-defined range
f) Rate of decrease	Decreasing <=1% (one percent or less) per year on average
5.8 Short-term trend; Method used	Based mainly on expert opinion with very limited data

5.9 Long-term trend; Period	2001-2024
5.10 Long-term trend; Direction	Decreasing
5.11 Long-term trend; Magnitude	
a) Minimum	
b) Maximum	
c) Confidence interval	
d) Rate of decrease	Decreasing <=1% (one percent or less) per year on average
5.12 Long-term trend; Method used	Based mainly on expert opinion with very limited data
5.13 Favourable Reference Area (FRA)	
a) Area (km²)	
b) Pre-defined increment	Current area is between 2% and 10% smaller than the FRA
c) Unknown	No
d) Method used	Reference-based approach
e) Quality of information	moderate

5.14 Change and reason for change in surface area of range

a) Change	Yes
b) Genuine change	No
c) Improved knowledge or more accurate data	Yes
d) Different method	No
e) No information	Yes
f) Other reason	No
g) Main reason	Improved knowledge/more accurate data

5.15 Additional information

No additional information

6. Structure and functions

6.1 Condition of habitat (km²)

Area in good condition	
ai) Minimum	0
aii) Maximum	0
Area not in good condition	
bi) Minimum	5.3
bii) Maximum	5.3
Area where condition is unknown	
ci) Minimum	25.83
cii) Maximum	25.83
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	2013-2024
6.4 Short-term trend of habitat area in good condition; Direction	Decreasing
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

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
PA02: Conversion from one type of agricultural land use to another (excluding drainage and burning)	Ongoing and likely to be in the future	Medium (M)
PA04: Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.)	Ongoing and likely to be in the future	Medium (M)
PA05: Abandonment of management/use of grasslands and other agricultural and agroforestry systems (e.g. cessation of grazing, mowing or traditional farming)	Ongoing and likely to be in the future	High (H)
PA07: Intensive grazing or overgrazing by livestock	Ongoing and likely to be in the future	Medium (M)
PA08: Extensive grazing or undergrazing by livestock	Ongoing and likely to be in the future	Medium (M)
PA13: Application of natural or synthetic fertilisers on agricultural land	Ongoing and likely to be in the future	Medium (M)
PA25: Agriculture activities not referred to above	Ongoing and likely to be in the future	High (H)

PF05: Sports, tourism and leisure activities	Ongoing and likely to be in the future	Medium (M)
PF15: Modification of coastline, estuary and coastal conditions for built-up areas	Ongoing and likely to be in the future	Medium (M)
PH04: Vandalism or arson (incl. human-introduced wild fire)	Ongoing and likely to be in the future	Medium (M)
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)
PJ01: Temperature changes and extremes due to climate change	Only in future	Medium (M)
PJ03: Changes in precipitation regimes due to climate change	Only in future	Medium (M)
PJ04: Sea-level rise due to climate change	Ongoing and likely to be in the future	Medium (M)
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)
PL05: Modification of hydrological flow (mixed or unknown drivers)	Ongoing and likely to be in the 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 and taken

8.2 Main purpose of the measures taken	Maintain the current range, surface area or structure and functions of the habitat type
8.3 Location of the measures taken	Both inside and outside National Site Network
8.4 Response to measures	Short-term results (within the current reporting period, 2019–2024)

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
MA01: Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land	High (H)
MA03: Maintain existing extensive agricultural practices and agricultural landscape features	High (H)
MA04: Reinstate appropriate agricultural practices to address abandonment, including mowing, grazing, burning or equivalent measures	High (H)
MA05: Adapt mowing, grazing and other equivalent agricultural activities (e.g. burning)	Medium (M)
MA09: Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production	Medium (M)
MA10: Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities	Medium (M)
MI05: Management of problematic native species	High (H)
MJ02: Implement climate change adaptation measures	Medium (M)
MK01: Reduce impact of mixed source pollution	High (H)
MI03: Management, control or eradication of other invasive alien species	Medium (M)
MK02: Reduce impact of multi-purpose hydrological changes	Medium (M)

MF03: Reduce impact of outdoor sports, leisure and recreational activities (incl. restoration of habitats)	Medium (M)
MH03: Reduce impact of other specific human activities	Medium (M)

8.6 Additional information

No additional information

9. Future prospects

9.1a Future trends of parameters

ai) Range	Negative - decreasing <=1% (one percent or less) per year on average
bi) Area	Negative - decreasing <=1% (one percent or less) per year on average
ci) Structure and functions	Very negative - important deterioration

9.1b Future prospects of parameters

aii) Range	Poor
bii) Area	Poor
cii) Structure and functions	Bad

9.2 Additional information

No additional information

10. Conclusions

10.1 Range	Favourable (FV)
10.2 Area	Unfavourable-inadequate (U1)
10.3 Specific structure and functions (incl. typical species)	Unknown (XX)
10.4 Future prospects	Unfavourable-bad (U2)

10.5 Overall assessment of Conservation Status	Unfavourable-bad (U2)
10.6 Overall trend in Conservation Status	Deteriorating

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 (km²)

a) Minimum	
b) Maximum	
c) Best single value	18.13
11.2 Type of estimate	Best estimate
11.3 Habitat area inside the network; Method used	Complete survey or a statistically robust estimate
11.4 Short-term trend of habitat area within the network; Direction	Decreasing

11.5 Short-term trend of habitat area within the network; Method used	Based mainly on extrapolation from a limited amount of data
11.6 Short-term trend of habitat area in good condition within the network; Direction	Uncertain
11.7 Short-term trend of habitat area in good condition within the network; Method used	Based mainly on expert opinion with very limited data

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

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Main pressures

7.2 Sources of information

No sources of information

14. Explanatory Notes

Field label	Note
2.3: Distribution map; Method used	The 10km square distribution and habitat area estimates are derived from a combination of different original sources, summarised below. A single aggregated GIS layer has been created for this habitat across Wales (data source 1 below) pulling together the maps and records from the other listed sources. A small amount of H1230 habitat was removed to align with H1330 Atlantic salt meadows where there were minor overlaps. Detailed processing notes for the 2018 Article 17 extent layer have been produced (Lewis et al. 2018) which will be updated. Some of the datasets used are relatively old and changes may have occurred since their production. There are also some issues with alignment when viewed against up to date aerial photographs. Crevice and ledge communities are under-recorded primarily due to physical constraints mapping of many sections of coast and there are gaps H1230 in coverage along many coastal areas. No crevice and ledge vegetation polygons were recorded for the Phase I survey of Wales and the NVC surveys have coverage of the crevice and ledge vegetation only where the terrain allowed access or where the vegetation could be assessed sufficiently from a distance to apply a community type. Similarly, the sea bird communities are also under-represented due to access issues. Data Source No.1: H1230 Extent Map 2025 Regulation 9a H1230 Extent Map 2025. Data Source No.2. Extent Maps from the previous 2 Reporting Rounds

Digital Layer: Article 17 H1230 Vegetated Sea Cliff Extent Layer 2018. (Lewis, et al 2018).

Digital Layer: Article 17 H1230 Vegetated Sea Cliff Layer 2013. (Rhind 2012).

Data Source No.3. Sea Cliff Inventory

Sea Cliff Inventory developed by Tantrum (Dargie 2005).

Data Source: Phase I Habitat Survey of Wales

Phase I Habitat Survey of Wales (Blackstock et al., 2010). This is a comprehensive survey of broad habitat types across Wales. The majority of the Phase I survey information used relates to cliff habitat outside of SACs.

Data source No. 5: Review of the Coastal Soft Cliff Resource

Review of the Coastal Soft Cliff Resource with particular reference to its Importance for Invertebrates, (Howe 2012). The spatial data reflects the extent of soft cliffs as a geological feature and do not relate to specific vegetation communities.

Data Source No.6: Lowland heathland Survey of Wales

Lowland heathland Survey of Wales (Prosser and Wallace 1995a, 1995b, 1996, 1997, 1999). This survey targeted heathlands of high conservation interest which included many coastal heaths. The survey also captured data relating to the Maritime Cliff NVC communities.

Data Source No. 7: NVC Survey Tŷ Ddewi

Tŷ Ddewi / St David's Coast NVC Survey 2015 (Shepherd 2016). Individual site survey primarily targeting the maritime grassland and maritime heathland vegetation.

Data Source No. 8: Vegetation Survey of the Clogwyni Pen Llŷn

Clogwyni Pen Llŷn NVC Survey 2016 (Haycock in prep.)

Individual site survey primarily targeting the maritime grassland and maritime heathland vegetation.

Data Source No. 9: NVC Survey of the Gower

A vegetation survey and conservation assessment of the Gower Limestone Coast (Smith et al. Individual site survey carried out in 2014 targeting the calcareous grassland, maritime grassland, maritime heath and dry heath vegetation. Maps used for this are to be incorporated into the NRW Lowland Grassland corporate dataset.

Data Source No. 10: NVC Survey of Soft Cliffs, Llŷn Peninsula

Vegetation survey of maritime cliff and slopes of the Llŷn Peninsula. (Prosser & Wallace 2000). A survey targeting cliff vegetation focusing on sections of soft cliff.

Data Source No. 11: Lowland Grassland Survey of Wales

Lowland Grassland Survey of Wales (Stevens et al., 2010). This survey targeted grassland communities on conservation interest. A number of coastal sites were mapped including the Great Orme.

Data Source No.12 Aerial Imagery 2013-2021

Digital Layers: NRW 2013 through to 2021 aerial photograph layers.

Some additions to the 2025 extent layer were made based on the aerial photographs where there were a few obvious

omissions or miss placement of polygons. Some deletions were made, mainly to account for overlaps with H1330 Atlantic Salt Meadows maps, these deletions were the result of issues with overly wide polygons to represent cliffs which then resulted in the overlaps. Any other deletions relating to habitat types not covered in the JNCC list of H1230 habitats were checked against aerial photographs from 2000 were consulted to check whether or not these were a result of habitat loss. However, due to lack of imagery prior to 1994 it is possible that some habitat loss could be unregistered.

Data Source No 13: Phase I Survey Information

The following mapping categories were included for the Vegetated Sea Cliff layer:

H8.1 Maritime hard cliff

H8.2 Maritime soft cliff

H8.4 Coastal grassland

H8.5 Coastal heathland

H8.6 Coastal grassland/heathland mosaic

Coastal grassland polygons not located on cliffs were excluded from the selection in 2018 for example, occurrences where coastal grassland occurs on sea walls/ flood banks and or has been mapped on the upper edges of saltmarsh.

Data Source No 14: National Vegetation Classification

Detailed National Vegetation Survey (Rodwell (ed.) 2000 1991a, 1991b, 1992, 1995) information exists for the majority of the coastal slope element of the vegetated sea cliff feature within SACs in Wales. These data come from

	numerous different surveys from 1995 through to 2016 (listed above). Mapping categories selected from these surveys to produce the vegetated sea cliffs extent map were: MC1, MC4-12, H7, H8d and CG1f and maritime variants of some scrub communities. A small number of additional non-standard mapped categories relevant to sea cliffs we included. Bare rock polygons were included up to 500m inland where in mosaic with maritime grassland and heathland.
4.3: Short-term trend; Direction	See 4.11
4.11: Change and reason for change in surface area of range	There is no evidence to indicate a genuine change in range of H1230 in Wales since 2013, nor is one considered likely to have occurred. Re-examination of the underpinning survey data has led to the exclusion of some areas of habitat from the map.
5.7: Short-term trend; Magnitude	The overall extent of vegetated sea cliff habitat in Wales is considered to have declined both in the long and short term. This judgement is based largely on expert opinion; there is limited quantitative data on which to base an assessment of the scale and rate of decline. There are continued positive actions by NRW with management agreements, capital works and Welsh Government's Agri-Environment schemes, Glastir and Habitats Wales. A number of successful conservation projects run by local authorities, National Parks and NGOs. However there remain significant pressures which will inevitably lead to a slow decline in habitat extent. Scrub, European gorse, bracken and bramble is spreading into areas of former coastal heathland and maritime grassland due to the abandonment of cliff top grazing. Excluding livestock, particularly heavy stock, from cliff tops which are both marginal for agriculture and difficult to manage has become common. This is leading to conversion of the coastal grasslands and heathland to scrub outside of the more exposed locations, which would

	then not be considered vegetated sea cliff habitat. The encroachment of more intensively managed agricultural land on cliff tops is occurring outside of protected sites. Cliffs naturally erode and as they retreat losses are incurred where the cliff top vegetation is squeezed against more intensively manged agricultural land or development. This is a particular issue for soft cliffs where the rate of erosion is often relatively rapid. Losses relate to the cliff top heath and grassland vegetation rather than the ledge and crevice vegetation of the vertical or near vertical cliff faces. No loss in extent was recorded from the four SACs supporting this feature which were monitored between 2013 and 2018; no monitoring of H1230 has been carried out since the end of the last reporting round. There is minimal information relating to trends in the extent of the habitat outside of protected sites, which makes up 27% of the total feature area. Clogwyni Pen Llŷn, Glannau Ynys Gybi, Pen Y Gogarth and Tŷ Ddewi; the only area of Tŷ Ddewi which was monitored in the 2013-18 reporting round was Ramsey Island.
5.11: Long-term trend; Magnitude	The pressures from abandonment and agricultural intensification. See section 5.7.
5.14: Change and reason for change in surface area	The habitat area estimate is derived from a combination of different original sources, summarised below. A single aggregated GIS layer has been created for this habitat across Wales (See section 2.3) pulling together the maps and records from the other listed sources. Differences in the habitat extent reported between 2018 and 2024, are primarily due additions and deletions to the 2025 extent layer which were made based on the aerial

	photographs where there were a few obvious omissions or where H1230 was unlikely to have been prior to 1994. Some deletions were made to account for a number of overlaps between H1230 polygons and with H1330 Atlantic Salt Meadows maps. Any other deletions relating to habitat types not covered in the JNCC list of H1230 habitats were checked against aerial photographs from 2000 were consulted to check whether or not these were a result of habitat loss. However, due to lack of imagery prior to 1994 it is possible that some habitat loss could be unregistered. Some of the datasets used are relatively old and changes may have occurred since their production and there are issues with alignment when viewed against up to date aerial photographs. Crevice and ledge communities are under-recorded primarily due to physical constraints mapping of many sections of coast and there are significant gaps H1230 in coverage along many coastal areas. No crevice and ledge vegetation polygons were recorded for the Phase I survey of Wales and the NVC surveys have coverage of the crevice and ledge vegetation only where the terrain allowed access or where the vegetation could be assessed sufficiently from a distance to apply a community type. Similarly, the sea bird communities are also under-represented due to access issues. Often the vertical or near vertical cliff faces have not been included in surveys as a mapped polygon which has led to breaks in the coverage of this element of the sea cliff feature along significant stretches of coast.
6.1: Condition of habitat	The most recent results from the 2013 to and 2018 reporting round covered 3 SACs: Glannau Ynys Gybi, Clogwyni Pen Llŷn and Pen Y Gogarth. Ramsey Island, part of a fourth SAC, Tŷ Ddewi , was also monitored.
6.2: Condition of habitat; Method used	None of the SACs supporting H1230 as a grade A-C feature in Wales have been assessed within the 2019-2025 reporting round. The most recent results from the 2013 to

	and 2018 reporting round covered 3 SACs and an Island making up a partial area of a 4th SAC. All sites monitored were classed as being in 'unfavourable condition'. For the sites which were monitored throughout the condition was based on an overall assessment of the whole feature within the site. These results, which are based on common standards monitoring (JNCC2004), represent a relatively coarse grain assessment of habitat condition and mask a significant level of variation in habitat quality, structure and function across the feature. The fourth site was just based on the area of H1230 on Ramsay Island. Generally, the hard cliff crevice and ledge communities, in particular those associated with the splash zone, are little modified and are functionally intact while cliff top habitats are often in poorer condition. However, even with these landward communities there will be stretches of coastline which are in good condition along with other areas in poorer condition. The area taken as in 'Not Good Condition' from the SACs uses the extent figures from the extent within the SACs rather than from the Standard Data N2K Forms.
6.4: Short-term trend of habitat area in good condition; Direction	The most recent results are from the 2013 to and 2018 reporting round covered 3 SACs: Glannau Ynys Gybi, Clogwyni Pen Llŷn and Pen Y Gogarth. Ramsey Island and part of a fourth SAC, Tŷ Ddewi , was also monitored. All sites monitored were assessed as Unfavourable. The direction of trend was given in just one SAC, Clogwyni Pen Llŷn; Unfavourable: Declining. 65% of the H1230 feature is outside of SACs and very little monitoring has been carried out within these areas. Positive management is known to have led to localised and often significant improvements in the condition of H1230. Besides ongoing actions resulting from work by NRW within

	the protected sites series and Welsh Governments Agri-Environment schemes; other initiatives to improve the quality of the sea cliff habitats by National Parks, local authorities and NGOs have led to improvement in the condition of Vegetated Sea Cliffs. For example, on the Llŷn Peninsula the Tir a Môr and in Pembrokeshire Coast National Park the Connecting the Coast projects (which have both now come to an end). However, overall, the area of positive management is unlikely to outweigh the extent of sea cliff which is in poor condition. Within the feature area categorised as 'unknown' there will be some habitat in good condition and some poor. The vertical cliff faces of hard cliffs are subject to less pressures than the cliff top and soft cliff elements of this feature and are therefore more likely to be in favourable condition. However, outside of protected sites (SACs and SSSIs) which is 27% of the feature area the vegetated sea cliffs are more vulnerable to agricultural intensification and are less likely to have targeted conservation management, the likely outcome of this is that the habitat in good condition is declining, although there is little quantitative evidence to substantiate this. In the absence of further substantial monitoring data the trend is assessed as 'Decreasing' because despite the areas where positive management is occurring the H1230 habitat remains to be subject to ongoing pressures (summarised in Section 7) which will be contributing to a deterioration in condition.
7.1: Characterisation of pressures	These pressures have been identified from different sources including academic literature and from NRW's own reports, expert opinion and discussions with internal staff. This information was then matched to expert judgement on the severity of these pressures/threats to give an overall evaluation of the pressure/threat level across the whole feature. PA02 Conversion from one type of agricultural land use to

another (excluding drainage and burning)

Agricultural improvement of coastal grasslands is a pressure on many cliff top sites, primarily outside of protected sites. Conversion to more intensively managed agricultural land has occurred historically but is also currently continuing, although at a much lower rate.

Intensively managed agricultural grassland often occurs over time and imperceptibly through a slow decline primarily outside of protected sites but in many cases this will also encroach right up to the boundaries of protected sites which sometimes leads to issues such as fertiliser run off. Coastal grasslands and heathlands are becoming squeezed between the cliff edges and the intensively managed farmland.

PA04 Removal of small landscape features for agricultural land parcel consolidation (hedges, stone walls, rushes, open ditches, springs, solitary trees, etc.)

Increasingly parcels of land, primarily outside of protected sites are becoming uniform and as they become managed more intensively for agriculture. In particular, traditional 'cloddiau' (stone faced banks with hedges on top- most) are being lost due to lack of maintenance, small areas of wetlands are being filled, streams culverted and field boundaries removed all of which decreases the heterogeneity of the cliff top habitat and the way in which it supports biodiversity. Although these small scale features often cover little area the cumulative effects are significant.

PA05 Abandonment of management/use of grasslands and other agricultural and agroforestry systems (e.g. cessation of grazing, mowing or traditional farming) &

PA08 Extensive grazing or undergrazing by livestock

Abandonment of grazing or undergrazing is widespread on

clifftops where bracken, gorse and scrub is replacing coastal grassland and heath (SoNaRR 2020a). This is currently one of the greatest pressures for cliff top grasslands and heathlands. The clifftops are marginal for agricultural grazing and livestock welfare issues e.g. worrying of livestock by uncontrolled dogs contributes to some cliff top grasslands and heathlands to being ungrazed.

PA07 Intensive grazing or overgrazing by livestock

In general, economic pressures for increased productivity are driving changes to management practices including higher grazing levels (SoNaRR 2020b). This issue is becoming more widespread on the sea clifftops, however intensive grazing is primarily an issue outside of protected sites.

Effects of intensive grazing or overgrazing include a decrease in species diversity, the spread of agricultural weed species and poor sward structure. A decline in flowering species has had knock-on effects for bees and other invertebrates. Evidence for this is not widely recorded, however, expert opinion is supported by on the ground observations. There is encroachment of farmland more intensively managed for agriculture outside of protected sites and in some cases right up to the boundaries of protected sites. Extent of cliff top coastal grassland and heathland has declined primarily due to agricultural intensification and abandonment on the coastal slopes and cliff tops (SoNaRR 2020). This relates to both historical and current pressures.

PA09 Burning for agriculture

Burning was highlighted as a pressure in all of the SACs where H1230 is a feature in 2018 (SAFLE database). This relates to coastal heath; the H1230 heathland component includes the H7 Calluna vulgaris-Scilla verna heath

vegetation community which should not be burnt as it is a natural climax community, H8d the Calluna vulgaris- Ulex galii, Scilla verna sub community heath in general should be cut rather than burnt due to issues with restoring vegetation in exposed conditions.

PA13 Application of natural or synthetic fertilisers on agricultural land

Application of fertilizer will lead to loss and change in habitat type from unimproved grasslands to semi-improved and improved grasslands. It could also lead to runoff where applied to areas adjacent to sea cliff habitats.

PA25 Agriculture activities not referred to above

Grazing type and timing was reported as a pressure and a threat occurring on all 5 SACs which support this H1230 (SAFLE Database). This relates to lack of grazing by heavy stock and grazing during the wrong time periods, for example heavy grazing in late summer on heathland. Grazing by heavy livestock is important on the cliff tops; it helps maintain a varied vegetation structure opening up the maritime heath and stands of bracken to which enables a mosaic of cliff top habitats to form.

PD05 Development and operation of energy production plants (including infrastructure)

There is potential for a new nuclear power station to be built on Ynys Môn/ Anglesey which could involve loss of H1230 habitat. Coastal grasslands can be compensated for however, crevices and ledge communities would be very difficult to recreate.

PF05 Sports, tourism and leisure activities

There has been significant growth in the outdoor activity tourism in Wales since 2014 (Miller et al., 2023). The

number of outdoor recreation visits to coastal and marine ecosystems has risen from 60 million in 2019 to 63 million in 2022 (Office for National Statistics, 2023). This increase has the potential to lead to damage to habitats in some areas and an increase in disturbance to species, particularly in popular locations. Issues related to sports tourism and leisure are widespread but have varying levels of impact, often issues are very localised and only apply to a small number of areas where access is highest.

Issues include trampling leading to damage to vegetation and erosion. Coastering and climbing can also have an impact on ledge and crevice cliff vegetation and where unregulated may have an adverse impact on cliff nesting birds.

PF15 Modification of coastline, estuary and coastal conditions for built-up areas

Modification to the coastline in relation to sea cliffs has generally been carried out prior to 1990. Modifications include the construction of ports and harbours and the defences to protect roads and railway lines but this pressure also occurs outside of built up areas sometimes to protect agricultural land or isolated houses. In many cases defences to prevent erosion includes soft cliff frontage. The impacts of this prevent natural processes from occurring, erosion drives the creation of bare ground which is important for invertebrates and dynamic pioneer habitats which characterise soft cliff vegetation.

PH04 Vandalism or arson (incl. human-introduced wild fire)

Accidental or deliberate fires can be a major threat on some sites. A particular area where has happened relatively frequently is Holyhead Mountain within the Glannau Ynys Gybi SAC . It has resulted in areas of bare ground in amongst the coastal and dry heath on the mountain. Other areas such a Pembrokeshire are

vulnerable to accidental burns or arson.

PI02 Other invasive alien species (other than species of Union concern)

Non-native species have been identified as a pressure and a threat on all of the SACs supporting H1230 in the last reporting round.

There are a wide range of invasive species threatening sea cliff vegetation, often difficult to tackle because of the difficult terrain. Non-native varieties of Cotoneaster are causing problems on a number of locations including Great Orme's Head where it threatens the native Cotoneaster cambricus and the Limestone Coast of South Wales. Other non-natives which have established and are impacting the maritime cliff vegetation include; Purple dewplant (Disphyma crassifolium) sea cliffs on Ynys Môn/Anglesey, Holm oak (Quercus ilex), White stonecrop (Sedum album) and Red valerian (Centranthus ruber) are relatively widespread.

Himalayan balsam (Impatiens glandulifera) Montbretia (Crocrosmia x crocosmifolia), Rhododendron ponticum and are present sea cliffs in less exposed situations.

PI03 Problematic native species

This pressure primarily relates to scrub, bracken, European gorse and bramble encroachment leading to poor condition and habitat loss. This is a widespread problem highlighted for all SACs in 2018. Insufficient grazing levels can result in scrub encroachment (See pressure PA05 and PA08 above). This pressure was identified within all of the SACs supporting H1230 in Wales in the 2018 reporting round.

PJ01 Temperature changes and extremes due to climate change

Observations show an overall annual warming in the UK during recent decades and over land the projected general trends of climate changes in the 21st century are a move towards warmer, wetter winters and hotter, drier summers with some natural variation (UKCP 2018) Warmer temperatures could lead to changing patterns and distribution of vegetation and species. Movement of thermophilic species north with increasing temperatures could occur, however this will be dependent on habitat connectivity (Burden et al., 2020). Although many of the sea cliff species are adapted to thin soils and parched conditions extreme high temperatures coupled with drought could lead to habitat loss over time.

PJ03 Changes in precipitation regimes due to climate change

Over land the projected general trends of climate changes in the 21st century, predict warmer, wetter, winters and hotter, drier, summers (UKCP18). UK climate change projections show a pattern of larger increases in winter precipitation over southern and central England, and some coastal regions towards the end of the century (UKCP18). In soft cliffs, increased winter rainfall may promote greater risk of landslides. Old landslide complexes are likely to reactivate more rapidly than expected as groundwater pressure increases. The balance of bare ground to successional vegetation may be altered on soft cliffs, with potential loss of mosaics important for scarce invertebrates, but conversely may create greater areas of the new habitat necessary for early successional species (Burden et al., 2020).

PJ04 Sea-level rise due to climate change

Under climate change, sea-level rise and changes to the wave climate (storminess and prevailing wave direction) will impact erosion rates (Masselink and Russel, 2013). Increased erosion due to sea level rise and wave exposure

will lead to habitat loss particularly where there are no buffer zones; areas where there are no options for cliff top habitats to 'roll back' e.g. where there is intensive farmland close up to the cliff edges or where there is cliff top development. This pressure is a serious issue for soft cliffs where the erosion rates will increase. This will lead to habitat loss and fragmentation. Increases in wave exposure are also likely have some effect on the distribution of the rock crevice vegetation.

PJ10 Change of habitat location, size, and / or quality due to climate change

Climate change pressures acting together could lead to habitat loss and poor condition.

Climate change could potentially to lead to a shift in the distribution of species to higher latitudes as populations attempt to track suitable climatic conditions. Movement of thermophilic species north with increasing temperatures could occur, however this will be dependent on habitat connectivity and potentially a range of other pressures and barriers to movement of species which make up sea cliff habitats (Burden et al., 2020). Connectivity of the sea-cliff habitat is naturally restricted by the physical nature of the coast and is in itself affected by increases in cliff erosion rates driven by climate change (Burden et al. 2020). Increases in temperature could favour invasive species and increased salinity which would lead to changing plant species communities or poor conditions through stress.

PK03 Mixed source air pollution, air-borne pollutants

PK04 Atmospheric N-deposition

Almost 100% of the H1230 habitat has exceeded the critical limit for Nitrogen deposition. The level set for the N deposition was 5kgN/ha/y based on that of dry heaths as the coastal heathland element of the Vegetated Sea Cliffs

	is the most sensitive of the 'sub-habitats' encompassed within this Annex 1 habitat. However, the sea cliff 'sub-habitats' vary with climate, degree of exposure to salt, geology and soil type, level of grazing and seabird activity (APIS). Natural inputs of nitrogen through sea spray mean that some of the component habitats which make up this feature are more tolerant than others. For example, lichen rich coastal heathland is likely to have a high sensitivity to additional N deposition, whereas crevice and ledge communities on the vertical or near vertical cliff faces are likely to be relatively tolerant. PL05 Modification of hydrological flow (mixed or unknown drivers) Modifications to streams including changing channels and culverting and creation of drainage ditches can alter the range of habitats. Soft cliffs are particularly vulnerable to changes to hydrological flow as seepages through the cliffs are particularly important to maintain dynamism and support dependant species. In areas where there is infrastructure or residential properties sometimes changes are made to hydrology to prevent cliff slippage. However, this pressure is relatively localised.
8.5: List of main conservation measures	MA01: Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land A high percentage of H1230 lies within designated sites and is therefore, relatively secure from deliberate land use change to intensive agricultural land. Area of H1230 within SACs in Wales is 1812.95ha The area of H1230 within All SSSI's (which include those which underpin SAC's) is 2297ha. Conversion to more intensively managed agricultural land from unimproved and semi improved is continuing, but at a much lower rate than historical conversion partly due to the

Environmental Impact Assessment (Agriculture) Regulations restricting the conversion of semi-natural land. Monitoring of areas outside the protected sites series is needed for this issue to be fully addressed.

See also measures for MA03 below.

MA03: Maintain existing extensive agricultural practices and agricultural landscape features

MA04: Reinstate appropriate agricultural practices to address abandonment, including mowing, grazing, burning or equivalent measures

MA05: Adapt mowing, grazing and other equivalent agricultural activities (e.g. burning)

Management Agreements within SSSIs and SACs continue to make an ongoing positive difference to site management. There are currently 375.7ha of H1230 which are managed under NRW management agreements.

The Glastir agri-environment scheme ran between 2012 and 2023. In 2023 there were 488ha of H1230 which were covered by Glastir agreements. Glastir has been replaced by Habitat Wales, a bridging scheme which will run until the Wales Sustainable Farming Scheme (SFS) is fully implemented; the SFS will be phased in from 2026. However, uptake for Habitat Wales has been lower than for Glastir, it is likely this will have affected the number of farms which include sea cliff habitat.

The Connecting the Coast project within Pembrokeshire Coast National Park Authority project to restore and protect habitats included 76ha of coastal slope under positive management agreements; funded by the Welsh Government Sustainable Landscapes, Sustainable Places Programme. In addition, further habitats including permanent pasture and hay meadows on the coast were

also brought into conservation management (Pembrokeshire Coast National Park 2024 On line); this will also help ensure transitions to terrestrial grassland.

The 'Tir a Mor Llŷn (Land and Sea) project, ran between 2018 and 2022 undertook and delivered a programme of land management interventions, both on and off designated sites, to improve the connectivity value of the coastal strip on Pen Llŷn, Gwynedd. The project included excluding grazing in the spring to allow plant species to flower and set seed, provision of provided livestock infrastructure e.g. drinking troughs, and fencing to help keep grazing on the coastal slopes and communicating to the public the importance of keeping dogs under control. In addition, a 'Payment for Outcomes' (PFO) project on coastal farms was trialled with overall positive result demonstrating the success of the project. See also MJ02.

Continuation and scaling up of these projects is required to reverse the declining trend of H1230.

MA09: Manage the use of natural and synthetic fertilisers as well as chemicals in agricultural for plant and animal production

Within protected sites this is tightly controlled- requiring SSSI consent. In the wider countryside the Environmental Impact Assessment (Agriculture) (Wales) Regulations 2017 will also play a role in manage the use of natural and synthetic fertilisers along with the Habitats Wales and the incoming Sustainable Farming scheme.

MA10: Reduce/eliminate point or diffuse source pollution to surface or ground waters (including marine) from agricultural activities

The Water Resources (Control of Agricultural Pollution) (Wales) Regulations Act 2021 has come into force and it has the potential to improve water quality for H1230.

MI05: Management of problematic native species

This relates primarily to scrub, bracken, European gorse and bramble encroachment. This is a widespread problem which impacts all SACs with H1230. Lack of appropriate grazing can result in scrub encroachment. This is an ongoing management issue but scrub clearance has been carried out and the introduction of appropriate grazing has been implemented on a number of sites.

Continuation and scaling up of scrub clearance and the implementation of appropriate grazing is required to reverse the declining trend of H1230.

MJ02: Implement climate change adaptation measures

The Conserving the Coast work and Llŷn Partnership have helped to broaden the coastal belt in places to ensure habitats are able to roll back with coastal erosion due to climate change. However, this accounts for a small proportion of the H1230 habitat. The creation of buffer zones preferably to one field back from the cliff edge with appropriate conservation management inland would help H1230 adapt to change. Critical locations for implementing buffer zones include some of the more rapidly eroding cliffs.

Restoration of habitats to improve connectivity of cliff top habitat and increase resilience needs to be scaled up and accelerated. See also MA03 and MA04.

MI03: Management, control or eradication of other invasive alien species

Management of invasive non-native species is being carried out on a number of sites but this work is ongoing but is often difficult to tackle INNS on hard cliff faces. Within the Limestone Coast of South Wales works have been

carried out to tackle species such as Cotoneaster and Holm Oak.

MF03: Reduce impact of outdoor sports, leisure and recreational activities (incl. restoration of habitats)

Efforts are being made to avoid and manage impacts of access and recreational impacts. For example, Wales Activity Mapping South West Area: Mapping the Potential Risk to Marine Conservation Features from Multiple Recreational Activities. Recently temporary restrictions have been put in place on a site on Ynys Môn/Anglesey to protect breeding birds and lichens on the cliffs from pressures from recreational activities.

MH03: Reduce impact of other specific human activities

This relates to deliberate (arson) or accidental fires impacting coastal heathland. This can be a significant pressure but fairly localised. At some sites where this is an issue, efforts to connect with local communities to help tackle this issue are occurring for example in west Wales the Pembrokeshire Wildfire Group was set up to help wildfire prevention in Pembrokeshire.

MK01: Reduce impact of mixed source pollution

There are various air quality strategies and initiatives in place to protect and enhance biodiversity. Air quality limit values set out in the Air Quality Strategy (AQS) are transposed into national legislation by the Air Quality Standards (Wales) Regulations 2010. Nitrogen deposition continues to impact semi-natural habitats in Wales. These regulations are not habitat-specific, however with introduction of The Environment (Air Quality and Soundscapes) (Wales) Act 2024 in Wales, this brings in new national targets for air quality pollutants, with the potential of directly influencing habitat protection.

	This key legislative advancement requires mandatory targets for fine particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$) to be established by February 2027, including new powers for Welsh Ministers to set pollutant-specific targets in future years (e.g., ammonia, nitrogen dioxide) linked to biodiversity outcomes, potentially enabling future habitat-sensitive thresholds. Welsh Government have also introduced The Agriculture (Wales) Act in 2023. It aims to establish a framework of Sustainable Land Management (SLM) objectives to underpin agricultural support, including the Sustainable Farming Scheme (SFS). The Act provides Welsh Ministers with the power to provide support (financial or otherwise) for or in connection with 15 purposes, including 'Improving air quality'. Welsh Government published a consultation on the SFS which closed in March 2024. Welsh Ministers will not be making final scheme design decisions until further stakeholder work is undertaken. The Air Pollution Trends Report 2023: Critical Load and Critical Level exceedances in the UK (Rowe et al.,) assessed the area of habitats at risk from air pollution between 2003 and 2020. Whist there has been a decline in the extent of pressure from acidification between there has been there been little change for the pressure from nutrient N deposition, both of these pressures cover extensive areas, N sensitive habitats have exceedance of over 85%. There has been increase in the extent of the pressure for gaseous ammonia since 2003. Despite legislation it is likely air poor quality is likely to remain as a pressure into the future.
9.1:Future trends and prospects of parameters	Range: Although there have been positive action, the spread of scrub is impacting the extent of coastal heathland and maritime grassland where grazing management has declined and the encroachment of more intensively managed agricultural land on cliff tops is occurring outside

of protected sites. Natural cliff erosion is incurring losses where the cliff top vegetation is unable to roll back and is squeezed against more intensively manged agricultural land or development. This is a particular issue for soft cliffs where the rate of erosion is often relatively rapid.

Area:

A good proportion of H1230 is within the protected sites series (73%) which provides a level of protection for loss and damage of the feature. Management agreements within SSSIs and SACs and number of projects focused on coastal habitats continue to make an ongoing positive difference to site management which will help both prevent loss of habitat and in some cases restore habitat. It is anticipated that the Welsh Governments Sustainable Farming Scheme will make a positive impact when it begins to be phased in in 2026.

However, the sea cliff habitat is compromised in many parts of the coast. Many of the inland transitional margins have been truncated leading to fragmentation of habitats and loss of transitions to more terrestrial semi natural habitats. The vast majority of these changes were prior to the Habitats Directive 1994. Confined now to a very narrow strip along the coast, fragmentation of the H1230 habitat has occurred and decline is likely to be continuing.

Where H1230 is bordered by intensive agricultural land, cliff top habitats responding to natural erosive processes and the exacerbated pressures of climate change is being prevented from rolling back inland leading to further losses in extent.

Pressure such as agricultural abandonment and encroachment of more intensive agricultural management will also lead to loss in extent.

Structure and function:

A high proportion of H1230 is within the protected sites series (73%) affording higher protection from loss or damage. However, a significant area within SACs is also in poor condition. NRW management agreements within SSSIs and SACs continue to make an ongoing positive difference to site management as do a number of projects focused on coastal habitat restoration run by NGO's and local Authorities and National Parks. It is anticipated that the Welsh Governments Sustainable Farming Scheme will make a positive impact when it begins to be phased in in 2026.

However, the sea cliff habitat is compromised in many parts of the coast. Many of the inland transitional margins have been truncated leading to fragmentation of habitats and loss of transitions to more terrestrial semi natural habitats. The vast majority of these changes were prior to the Habitats Directive 1994 but confined now to a very narrow strip along the coast fragmentation of the habitat has occurred and will continue leading to poor condition within shrinking areas of habitat.

Pressure such as agricultural abandonment and the encroachment of more intensive agricultural management continue and this will inevitably lead to a slow decline in condition of the features.

Environment schemes continue to make an ongoing positive difference to site management as do a number of projects focused on coastal habitat restoration.

Nitrogen deposition is known to exceed the critical load for roughly a third of this feature (based on the critical load for the heath element of this feature). Although emissions are falling, deposition is likely to exceed the critical levels for some time. This increases the likelihood of invasion by more nitrophilic, competitive grasses and increased scrub and bramble growth continue to have detrimental effects on

	the habitat in the long term. The Future prospects for Structure and functions takes into account that at least 25% of the habitat area is expected to be in unfavourable (not good) condition in c.2035 due to nutrient N critical load exceedance, unless additional measures are taken to reduce N deposition impacts.
10.1: Range	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.
10.2: Area	Conclusion on Area reached because:(i) the short-term trend direction in Area is decreasing by 1% per year or less; (ii) the current Area is not more than 10% below 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 the condition of the habitat is unknown as over 75% of the habitat has 'unknown' condition.
10.4: Future prospects	Conclusion on Future prospects reached because: (i) the Future prospects for Range are poor; (ii) the Future prospects for Area covered by habitat are poor; and (iii) the Future prospects for Structure and function are bad.
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.
11.4: Short-term trend of habitat area within the network; Direction	The most recent results from the 2013 to and 2018 reporting round covered 3 SACs: Glannau Ynys Gybi, Clogwyni Pen Llŷn and Pen Y Gogarth. Ramsey Island, part of a fourth SAC, Tŷ Ddewi , was also monitored representing 17% of the habitat within SACs. All sites monitored were assessed as Unfavourable. The direction of trend was given in just one SAC, Clogwyni Pen Llŷn; Unfavourable: Declining
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.