European Community Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC)

Fourth Report by the United Kingdom under Article 17

on the implementation of the Directive
from January 2013 to December 2018

Supporting documentation for the
conservation status assessment for the habitat:

H6230 - Species-rich *Nardus* grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe)

WALES

IMPORTANT NOTE - PLEASE READ

- The information in this document is a country-level contribution to the UK Report on the conservation status of this habitat, submitted to the European Commission as part of the 2019 UK Reporting under Article 17 of the EU Habitats Directive.
- The 2019 Article 17 UK Approach document provides details on how this supporting information was used to produce the UK Report.
- The UK Report on the conservation status of this habitat is provided in a separate document.
- The reporting fields and options used are aligned to those set out in the European Commission guidance.
- Explanatory notes (where provided) by the country are included at the end. These provide an audit trail of relevant supporting information.
- Some of the reporting fields have been left blank because either: (i) there was insufficient information to complete the field; (ii) completion of the field was not obligatory; and/or (iii) the field was only relevant at UK-level (sections 10 Future prospects and 11 Conclusions).
- For technical reasons, the country-level future trends for Range, Area covered by habitat and Structure and functions are only available in a separate spreadsheet that contains all the country-level supporting information.
- The country-level reporting information for all habitats and species is also available in spreadsheet format.

Visit the JNCC website, https://jncc.gov.uk/article17, for further information on UK Article 17 reporting.

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

NATIONAL LEVEL

1. General information

1.1 Member State	**UK (Wales information only)**
1.2 Habitat code	**6230 - Species-rich Nardus grasslands, on siliceous substrates in mountain are**

2. Maps

2.1 Year or period	1979-2017
2.3 Distribution map	Yes
2.3 Distribution map Method used	Complete survey or a statistically robust estimate
2.4 Additional maps	No

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions

3.1 Biogeographical or marine region where the habitat occurs	**Atlantic (ATL)**
3.2 Sources of information	Blackstock T. H., Howe E. A., Stevens J. P., Burrows C. R. & Jones P. S. 2010. Habitats of Wales. A comprehensive field survey 1979-1997. University of Wales Press, Cardiff. BRIG. 2007. A preliminary Assessment of the implications of climate change for the implementation of UK BAP targets. Report to UK Biodiversity Partnership Standing Committee. British Geological Survey. 2003. Digital geology data layer DiGMapGB250. BGS dataset. Countryside Council for Wales. 2012. Interpretation of grassland Annex 1 habitats in Wales for 2013 Article 17 reporting. CCW HQ internal document. Day, A. 1989. Upland vegetation survey 1979-1989. Background, methodology and summary of data collected. NCC report no. W91/2, Nature Conservancy Council, Bangor. Guest, D. 2012 (a). Assessing pressures and threats for article 17 reporting based on information in CCW's Actions Database. CCW HQ internal document. Guest, D. 2012 (b). Assessing N deposition as a pressure for Article 17 reporting on habitats. CCW HQ internal document. Harrison, T. 2017. Eryri SAC Monitoring Summary note: Species-rich Nardus grassland. Monitoring Round 2013 to 2018. NRW SAC Condition Report. JNCC. 2004. Common standards monitoring guidance for lowland grasslands. JNCC. http://jncc.defra.gov.uk/PDF/CSM_lowland_grassland.pdf Lewis. H. 2006. Eryri SAC: 6230 Species Rich Nardus Grassland, on siliceous substrates in mountain areas. SAC Monitoring report. Natural England and RSPB, 2014. Climate Change Adaptation Manual. Rodwell, J.S. (ed.). 1992. British plant communities. Volume 3. Grasslands and montane communities. Cambridge University Press, Cambridge. Smith, S.L.N., Sutton, M.D. & Turner, A.J. In prep. An assessment of a selection of non-statutory priority grasslands in Wales. NRW Evidence Report. Stevens J. & Smith S. 2012. H6230 Species-rich Nardus grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe): Wales GIS inventory. NRW HQ dataset. Updated 2017. Stevens D. P., Smith S. L. N., Blackstock T. H., Bosanquet S. D. S. & Stevens J. P. 2010. Grasslands of Wales. A survey of lowland species-rich grasslands, 1987-2004. University of Wales Press, Cardiff.

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Surry, K. 2012. Eryri SAC: 6230 Species Rich Nardus Grassland, on siliceous substrates in mountain areas. SAC Monitoring report.
NRW. 2017. Actions Database. NRW internal database.
Stevens, C.J., Dise, N.B., Mountford, J.O. & Gowing, D.J. 2004. Impact of Nitrogen Deposition on the Species Richness of Grasslands. Science 303: 1876-1879.
Van Den Berg, L.J.L, Vergeer, P, Rich, T.C.G., Smart, S.M., Guest, D & Ashmore, M.R. 2011. Direct and indirect effects of nitrogen deposition on species composition change in calcareous grasslands. Global Change Biology 17: 1871-1883.

4. Range

4.1 Surface area (in km²)			
4.2 Short-term trend Period			
4.3 Short-term trend Direction	Stable (0)		
4.4 Short-term trend Magnitude	a) Minimum	b) Maximum	
4.5 Short-term trend Method used			
4.6 Long-term trend Period			
4.7 Long-term trend Direction			
4.8 Long-term trend Magnitude	a) Minimum	b) Maximum	
4.9 Long-term trend Method used			
4.10 Favourable reference range	a) Area (km²) b) Operator c) Unknown No d) Method		
4.11 Change and reason for change in surface area of range	Improved knowledge/more accurate data The change is mainly due to: Improved knowledge/more accurate data		
4.12 Additional information			

5. Area covered by habitat

5.1 Year or period	1979-2017		
5.2 Surface area (in km²)	a) Minimum	b) Maximum	c) Best single value 1.368
5.3 Type of estimate	Minimum		
5.4 Surface area Method used	Complete survey or a statistically robust estimate		
5.5 Short-term trend Period	2007-2018		
5.6 Short-term trend Direction	Uncertain (u)		
5.7 Short-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval
5.8 Short-term trend Method used	Insufficient or no data available		
5.9 Long-term trend Period	1994-2018		
5.10 Long-term trend Direction	Uncertain (u)		
5.11 Long-term trend Magnitude	a) Minimum	b) Maximum	c) Confidence interval
5.12 Long-term trend Method used	Insufficient or no data available		
5.13 Favourable reference area	a) Area (km²) b) Operator c) Unknown No		

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5.14 Change and reason for change in surface area of range	d) Method	Improved knowledge/more accurate data
	The change is mainly due to:	Improved knowledge/more accurate data
5.15 Additional information		

6. Structure and functions

6.1 Condition of habitat	a) Area in good condition (km²)	Minimum	0.03	Maximum	0.03
	b) Area in not-good condition (km²)	Minimum	0.437	Maximum	0.437
	c) Area where condition is not known (km²)	Minimum	0.901	Maximum	0.901
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	2011-2017				
6.4 Short-term trend of habitat area in good condition Direction	Uncertain (u)				
6.5 Short-term trend of habitat area in good condition Method used	Insufficient or no data available				
6.6 Typical species	Has the list of typical species changed in comparison to the previous reporting period?	No			
6.7 Typical species Method used					
6.8 Additional information					

7. Main pressures and threats

7.1 Characterisation of pressures/threats

Pressure	Ranking
Intensive grazing or overgrazing by livestock (A09)	H
Extensive grazing or undergrazing by livestock (A10)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Sports, tourism and leisure activities (F07)	M
Problematic native species (I04)	M
Conversion into agricultural land (excluding drainage and burning) (A01)	M
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M

Threat	Ranking
Conversion to forest from other land uses, or afforestation (excluding drainage) (B01)	M
Intensive grazing or overgrazing by livestock (A09)	H
Extensive grazing or undergrazing by livestock (A10)	H
Mixed source air pollution, air-borne pollutants (J03)	H
Sports, tourism and leisure activities (F07)	M
Problematic native species (I04)	M

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Conversion into agricultural land (excluding drainage and burning) (A01)	M

7.2 Sources of information	
7.3 Additional information	

8. Conservation measures

8.1 Status of measures	a) Are measures needed?	Yes
	b) Indicate the status of measures	Measures identified, but none yet taken
8.2 Main purpose of the measures taken		Maintain the current range, population and/or habitat for the species
8.3 Location of the measures taken		Both inside and outside Natura 2000
8.4 Response to the measures		Short-term results (within the current reporting period, 2013-2018)
8.5 List of main conservation measures		

Prevent conversion of natural and semi-natural habitats, and habitats of species into agricultural land (CA01)
Manage the use of natural fertilisers and chemicals in agricultural (plant and animal) production (CA09)
Maintain existing extensive agricultural practices and agricultural landscape features (CA03)
Adapt mowing, grazing and other equivalent agricultural activities (CA05)
Prevent conversion of (semi-) natural habitats into forests and of (semi-)natural forests into intensive forest plantation (CB01)
Manage/reduce/eliminate air pollution from resource exploitation and energy production (CC10)
Reduce/eliminate air pollution from agricultural activities (CA12)

8.6 Additional information	

9. Future prospects

9.1 Future prospects of parameters	a) Range b) Area c) Structure and functions
9.2 Additional information	

10. Conclusions

10.1. Range	
10.2. Area	
10.3. Specific structure and functions (incl. typical species)	
10.4. Future prospects	
10.5 Overall assessment of Conservation Status	
10.6 Overall trend in Conservation Status	
10.7 Change and reasons for change in conservation status and conservation status trend	a) Overall assessment of conservation status No change

	The change is mainly due to:
	b) Overall trend in conservation status
	No change
	The change is mainly due to:
10.8 Additional information	

11. Natura 2000 (pSCIs, SCIs, SACs) coverage for Annex I habitat types

11.1 Surface area of the habitat type inside the pSCIs, SCIs and SACs network (in km² in biogeographical/ marine region)	a) Minimum b) Maximum c) Best single value 0.53
11.2 Type of estimate	95% confidence interval
11.3 Surface area of the habitat type inside the network Method used	Complete survey or a statistically robust estimate
11.4 Short-term trend of habitat area in good condition within the network Direction	Stable (0)
11.5 Short-term trend of habitat area in good condition within network Method used	Based mainly on extrapolation from a limited amount of data
11.6 Additional information	

12. Complementary information

12.1 Justification of % thresholds for trends	
12.2 Other relevant information	

Distribution Map

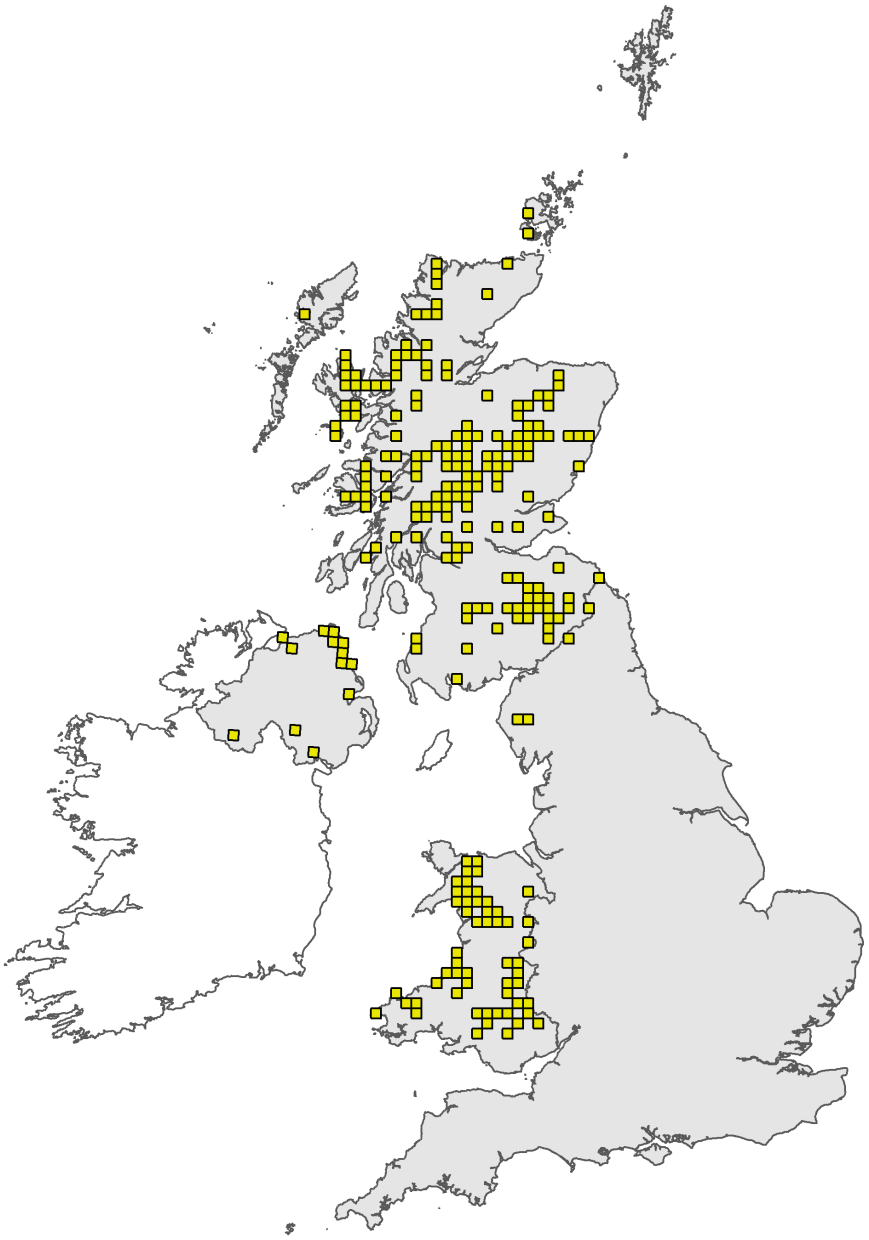

Figure 1: UK distribution map for H6230 - Species-rich *Nardus* grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government 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

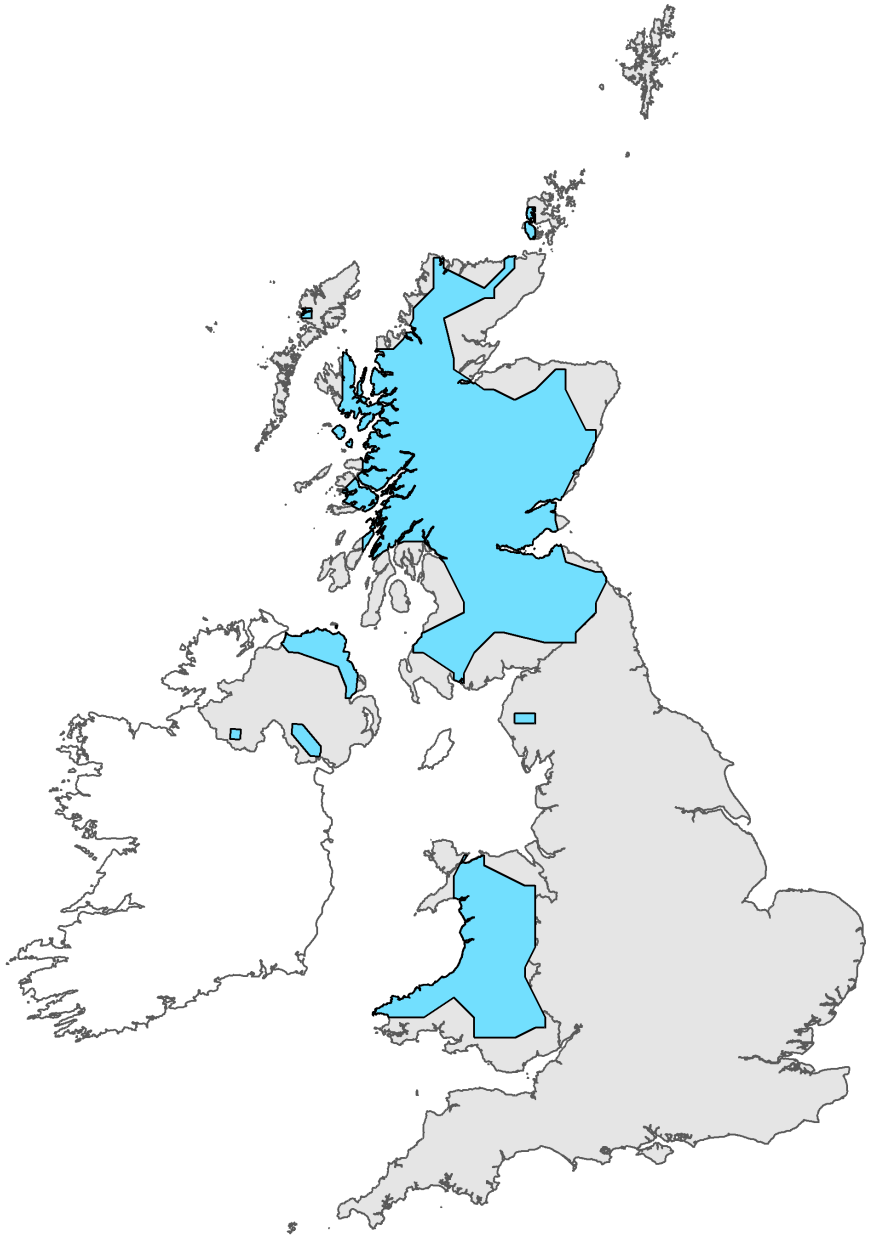

Figure 2: UK range map for H6230 - Species-rich *Nardus* grassland, on siliceous substrates in mountain areas (and submountain areas in continental Europe). Coastline boundary derived from the Oil and Gas Authority's OGA and Lloyd's Register SNS Regional Geological Maps (Open Source). Open Government 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.

Explanatory Notes

Habitat code: 6230

Field label	Note
2.3 Distribution map; Method used	The distribution (and extent) of H6230 has been calculated using several data sources, which are summarised below and listed on the 10km Habitat Data spreadsheet. A part polygon-based and part point-based GIS inventory for the habitat has been produced through pooling these data sources together (Stevens and Smith, 2012, with 2017 amendments). Data source 1 (MAIN DATA SOURCE): 'Phase 1' Habitat Survey of Wales (HSW; Blackstock et al., 2010). This was a comprehensive field-by-field survey of the region; distribution data for this habitat come entirely from the upland component of the survey, conducted between 1979 and 1989. All occurrences of the Upland Survey code C1e (Day, 1989) not occurring over limestone bedrock (BGS, 2003) were considered to correspond with this habitat and were included along with a single example of C1a/b. Further detail on the interpretation of H6230 in Wales can be found in CCW (2012). Data source 2 (MAIN DATA SOURCE): Lowland Grassland Survey of Wales (LGSW; Stevens et al., 2010). This was a targeted NVC (Rodwell (ed.), 1992) survey focussing on grasslands of high conservation interest in the Welsh lowlands. Survey work was conducted between 1987 and 2004. All LGSW occurrences of NVC CG10 not on limestone bedrock were included in the definition of H6230. In addition, examples of NVC U4 with abundant Thymus praecox (1 locality) and species-rich U4 containing basic/flush species (8 localities) were included (see CCW, 2012). Three species-rich examples of a vegetation type named by the LGSW as 'Nardus stricta - Succisa pratensis grassland' (no NVC equivalent; see Stevens et al., 2010) were also included in the distribution. Two small stands of grassland mapped during the original LGSW survey were retrospectively reassigned to CG10a in 2017 (Smith et al., in prep), adding 0.8 ha to the habitat extent and a single additional 10km square to those listed in 2013. Data source 3: A number of records of the habitat derived from individual NVC site surveys (1996-2005) (see 10km square distribution spreadsheet). These are mainly examples of CG10, but in addition, some species-rich examples of NVC U5 containing basic/flush species (8 localities) (see CCW, 2012). Data source 4: Incidental CG10 records near Capel Curig recorded by SBS Bosanquet, 2012 (unsurveyed point records). Data source 5: SAC monitoring in 2016 (Harrison, 2017) has confirmed the continued presence and extent of the habitat in some 10km grid squares in north-west Wales (Eryri SAC). The monitoring covers 31% of the habitat in Wales. Data source 6: Four localities surveyed by the LGSW were relocated during site visits in 2015, but the extent of the habitat at two of these had reduced since the original survey (Smith et al., in prep.). Notwithstanding the age of much of the information, together these data give good coverage of the region. However, it is almost certain that some stands have been overlooked, especially in parts of the uplands not benefiting from NVC survey. Coverage in the lowlands is considered good, as examples of CG10 and species-rich U4 of at least 0.5 ha (on a single site) were specifically targeted for detailed survey by the LGSW, although smaller areas were not included in this survey. There are no recent data or information for the majority of localities. That said, most Welsh localities are on protected sites (SSSI/SAC), and the bulk of the H6230 resource is located in the uplands where grassland loss to agricultural improvement has been much more limited than in the lowlands (Blackstock et al., 2010)

Habitat code: 6230 Region code: ATL

Field label	Note

4.11 Change and reason for change in surface area of range	There is no evidence of actual change in the range of this habitat since the previous report in 2013. However, re-examination of plant community data derived from the LGSW has resulted in reclassification of some habitat areas at one site and, as a result, the inclusion of an additional 10km square record to the recognised distribution (see 2.3 for more details)
5.1 Year or period	The data used to produce the total area figure are predominantly from prior to 2007. Post 2007 information includes: two point records from 2012; site visits to three lowland non-statutory sites in 2015 and to one site in 2017 (Smith et al., in prep.); and SAC monitoring at 1 site which supports 31% of the habitat in Wales in 2016 (Harrison, 2017) (see 2.3 for details). These data are considered to provide good coverage of the region (see 2.3) but much of the data is rather old (the two main datasets are from 1979-1981 and 1989-2004)
5.3 Type of estimate	The current total area is very likely to be an underestimate of the actual area for the following reasons: 1) some examples have almost certainly been overlooked due to paucity of survey information in some areas, especially in the uplands; 2) some examples included in the inventory (Stevens & Smith, 2012: updated 2017) are only point records with no extent data; 3). examples less than 0.5 ha (0.005 km2) in area were not specifically targeted by the LGSW
5.8 Short term trend; Method used	There is limited information on short term trends in extent for this habitat. SAC monitoring covers a single site in north Wales (Eryri) which supports 31% of the habitat in Wales - no changes in extent were noted during SAC monitoring in 2016 (Harrison, 2017) and 2011 (Surry, 2012), but extent was not formally assessed. Visits to four lowland non-statutory sites with the habitat in 2015/2017 noted decline in extent of the habitat at two of them, with a loss of area of 1.4 ha (0.014 km2). This is too small a sample size to make firm conclusions on trend in the habitat in the lowlands outside statutory sites. However, Smith et al. (in prep.) noted loss of priority lowland grassland habitats at 48% of non-statutory sites (61 sites, across an average 9.7-year period), and increase in habitat at only 8% of sites, strongly suggesting a recent trend in decline of unprotected lowland grassland habitats generally
5.12 Long term trend; Method used	Aside from the information in 5.8, an earlier revisit survey of lowland grassland non-statutory sites in 2004 recorded significant decline at 25% of sites (96 sites, over an average 8-year period) (Stevens et al., 2010). This and the Smith (in prep.) assessment suggest a continuing decline in unprotected lowland grassland habitat generally over the long-term trend period, but with insufficient data on H6230 specifically to make firm conclusions on trend in the habitat. Three SAC monitoring assessments over the period (covering 31% of the habitat in Wales) detected no changes in extent of the habitat: 2005 (Lewis, 2006), 2011 (Surry, 2012) and 2016 (Harrison, 2017), but did not formerly assess extent
5.14 Change and reason for change in surface area	The small gross reduction in surface area is due to a reduction in extent of the habitat recorded during detailed vegetation assessment at two sites in 2015 (Smith et al., in prep.) - a total decrease in extent of 1.4 ha (0.014 km2) was recorded. Re-examination of plant community data derived from the LGSW has resulted in reclassification of some small habitat areas at one site. No change in extent was noted during SAC monitoring (Harrison, 2017), which covers 31% of the habitat in Wales, although extent was not formally assessed. At least two thirds of the habitat have had no assessment of change in extent over the short and long term periods (see 2.3 and 5.8).

6.2 Condition of habitat; Method used	A single SSSI/SAC has received Common Standards Monitoring (JNCC, 2004) visits to assess the H6230 feature. The site (Eryri) contains 31% (0.042 km2) of the H6230 total area mapped in Wales and was monitored in 2005 (Lewis, 2006), 2011 (Surry, 2012) and 2016 (Harrison, 2017). The H6230 feature was found to be in unfavourable condition on each occasion. There is very little information about habitat condition on non-statutory sites. Visits to four sites in 2015/17 (Smith et al., in prep) noted decline in condition of the habitat at two of them (c.12 years since survey), but together these sites represent only 3.4% of the total of the habitat in Wales. Condition is essentially unknown for about two thirds of the habitat in Wales
6.3 Short term trend of habitat area in good condition; Period	These are the dates of the two most recent monitoring visits to the SAC in addition to the non-stat site survey
6.4 Short term trend of habitat area in good condition; Direction	Three plots were monitored in the SAC in 2011 and 2016. One of these showed a significant decline in quality and the other two non-significant change between the visits. The SAC feature was therefore considered to be 'declining'. However, trend in condition is essentially unknown for at least two thirds of the habitat in Wales
6.5 Short term trend of habitat area in good condition; Method used	See 6.2 & 6.4
7.1 Characterisation of pressures/ threats	Pressures: Data held in NRW's Special Sites Actions Database (NRW, 2017), which provides information on 'issues' affecting habitats and species within the protected sites series in Wales, were used to provide a basis for quantifying pressures/threats relating to the habitat. Data from the Actions Database for all SSSI management units containing the H6230 habitat were interrogated. A list of issues affecting these SSSI units was obtained and expert judgement used to deduce the severity of these pressures/threats affecting the H6230 habitat (see Guest, 2012 (a) for more details of approach). The special sites (SSSI and SAC) include 68% of the H6230 resource Wales by area. Using this method, A09 affected 56% of units, A10 49%, F07 27% and I04 17%. Information on a sample of non-statutory sites is provided by Smith (in prep), which for example showed that conversion into agricultural land remains a pressure on grasslands in the lowlands (A01, A19, A20). Air pollution (N deposition) (J03) is assessed separately using a defined approach (Guest, 2012 (b), using updated deposition data). Using a data overlay method in ARC GIS, 97% of the habitat by area (polygon data) was recorded at or above the relevant lower Critical Load limit. Conversion to forest (B01) was highlighted as a pressure in the previous (2013) report. Aspirational targets remain in Wales for high levels of tree planting. Upland calcareous grassland and lowland dry acid grassland have been assessed as having relatively low sensitivity to climate change (BRIG, 2007; Natural England and RSPB, 2014), although increased temperature and drought would be likely to negatively affect boreal/montane plant species of the habitat (N01, N02). Threats: These were assessed in a similar way to pressures. However, issues in the Actions Database which had been 'completed' or were 'underway' were not included in the assessment of threats. It is intended to use projected air pollution data to assess threat (J03), but this is not yet available. The high threat for J03 is thus provisional. Forestation targets are set to continue into the near future at least (B01)

8.5 List of main conservation measures	In Wales, 68% of H6230 by area is on SSSI (CA01 and CA09). 31% of H6230 total area is listed as a SAC feature. In the last reporting round, 16% of the total was on SSSI and was specifically covered by management agreement (unlikely to have changed significantly since then). In the NRW Actions Database (NRW, 2017) two management units have completed actions directed at the habitat: at managing grazing (CA05) and reducing disturbance from access/use (CF03). One site with the habitat was notified as an SSSI since the previous reporting round (CA01 and CA09). Two additional sites with significant areas of the habitat have been prioritised for SSSI notification and await notification (CA01 and CA09). Just over 50% of the habitat by area is covered by Glastir Advanced agreements: 28% is covered by 'reduced stocking' Glastir management option (CA05), 22% is covered by 'grazing management of open country' Glastir option (CA03). Other Glastir options cover less than 1% of the area of the habitat. These options cover the land parcels containing the habitat, but are not specifically targeted at the habitat. Guidance has been refined and is in place to control/prevent tree planting under Glastir Woodland Creation on semi-natural grassland habitat (CB01). National regulations are in place but have been insufficient to prevent continued high levels of N deposition nationally (CC10) and locally increasing ammonia pollution from expansion of poultry units (CA12). Control of extraction is done through site protection and dialogue at some quarry sites with the habitat (CC01) 8.1 is assessed with regard to the fact that a large proportion of the habitat does not receive any targeted management and the Glastir agreements are specific to the land parcels rather than the habitat

9.1 Future prospects of parameters	9.1a: NEGATIVE - With poor future prospects for area and poor future prospects for structure and function together with high rankings for threats from grazing and N pollution, we report 'NEGATIVE' for range over the next 12 years, as continued loss of area and condition is likely to start to express itself through deterioration in distribution and subsequently range. 9.1b: Decline in area recorded at two non-statutory sites (see 5.8). Two priority sites for the habitat remain unprotected and so at increased risk. 9.1c: Grazing issues only partially dealt with on SSSIs (which cover 68% of the habitat resource), with about half of identified actions directed at the habitat listed as 'complete'. Limited information for non-statutory sites, but Smith et al (in prep) suggest decline in condition generally for non-statutory grasslands (see 6.2). Only 50% of habitat covered by Glastir Advanced agreements. 97% of the habitat area in Wales currently exceeds the critical load (CL) for atmospheric nitrogen deposition and despite a modest projected decrease in total deposition in the Principality over the next 12 years this is not expected to bring any significant areas of the habitat below the CL threshold by 2030 (to be confirmed). This ongoing exceedance of the CL is likely to lead to decline in floristic quality (Stevens et al., 2004; Van Den Berg et al., 2011) and thus likely drive some areas into unfavourable condition and inhibit the recovery of others. Localised increases in ammonia emissions, notably as a result of the expansion of poultry units, will further compound these problems directly impacting sensitive species within the habitat (see 8.5). Two priority sites for the habitat remain unprotected and so at increased risk of inappropriate management. Confidence: Fairly good amount of information on extent, but poor level of agreement as mostly one-off surveys (few revisits). Data also rather old (main datasets 1979-81 and 1989-2004). SAC monitoring has not formally assessed extent (see 5.8). Structure and function: MEDIUM Medium level of information on structure & function and medium level of agreement: SACs have been monitored and found unfavourable (31% of the habitat by area); non-statutory sites assessment (Smith et al in prep) suggests decline in condition of grasslands generally, and two out of three examples of the habitat had declined. Information from Actions Database (NRW, 2017) suggest a range of issues, largely not dealt with. A fairly high proportion of this habitat is on statutory sites (68%), but many sites have grazing issues, many of which still need to be dealt with. High levels of atmospheric N pollution also threaten the habitat, compounded in some areas by levels of ammonia emissions from a rapidly increasing number of poultry units. Only a limited amount is known about non-statutory sites, but revisit surveys suggest general decline in lowland grassland habitats, albeit slowed. Two sites with the habitat await statutory protection.
11.5 Short term trend of habitat area in good condition within the network; Method used	Unfavourable during past three monitoring visits - see 5.12