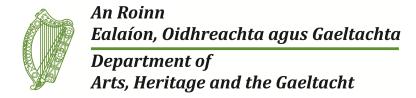
National Parks and Wildlife Service

Conservation Objectives Series

Slieve League SAC 000189





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Citation:

NPWS (201) Conservation Objectives: Slieve League SAC 000189. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Series Editor: Rebecca Jeffrey ISSN 2009-4086

21 Aug 2015 Version 1 Page 2 of 17

Introduction

The overall aim of the Habitats Directive is to maintain or restore the favourable conservation status of habitats and species of community interest. These habitats and species are listed in the Habitats and Birds Directives and Special Areas of Conservation and Special Protection Areas are designated to afford protection to the most vulnerable of them. These two designations are collectively known as the Natura 2000 network.

European and national legislation places a collective obligation on Ireland and its citizens to maintain habitats and species in the Natura 2000 network at favourable conservation condition. The Government and its agencies are responsible for the implementation and enforcement of regulations that will ensure the ecological integrity of these sites.

A site-specific conservation objective aims to define favourable conservation condition for a particular habitat or species at that site.

The maintenance of habitats and species within Natura 2000 sites at favourable conservation condition will contribute to the overall maintenance of favourable conservation status of those habitats and species at a national level.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Notes/Guidelines:

- 1. The targets given in these conservation objectives are based on best available information at the time of writing. As more information becomes available, targets for attributes may change. These will be updated periodically, as necessary.
- 2. An appropriate assessment based on these conservation objectives will remain valid even if the targets are subsequently updated, providing they were the most recent objectives available when the assessment was carried out. It is essential that the date and version are included when objectives are cited.
- 3. Assessments cannot consider an attribute in isolation from the others listed for that habitat or species, or for other habitats and species listed for that site. A plan or project with an apparently small impact on one attribute may have a significant impact on another.
- 4. Please note that the maps included in this document do not necessarily show the entire extent of the habitats and species for which the site is listed. This should be borne in mind when appropriate assessments are being carried out.
- 5. When using these objectives, it is essential that the relevant backing/supporting documents are consulted, particularly where instructed in the targets or notes for a particular attribute.

21 Aug 2015 Version 1 Page 3 of 17

Qualifying Interests

* indicates a priority habitat under the Habitats Directive

000189	Slieve League SAC
1170	Reefs
1230	Vegetated sea cliffs of the Atlantic and Baltic coasts
4010	Northern Atlantic wet heaths with O'asak'd abay
4060	Alpine and Boreal heaths
7130	Blanket bogs (* if active bog)
8210	Calcareous rocky slopes with chasmophytic vegetation
8220	Siliceous rocky slopes with chasmophytic vegetation

Please note that this SAC overlaps with West Donegal Coast SPA (004150). It adjoins Rathlin O'Birne Island SAC (000181) and Slieve Tooey/Tormore Island/Loughros Bag Bay SAC (000190). See map 2. The conservation objectives for this site should be used in conjunction with those for overlapping and adjacent sites as appropriate.

21 Aug 2015 Version 1 Page 4 of 17

Supporting documents, relevant reports & publications

Supporting documents, NPWS reports and publications are available for download from: www.npws.ie/Publications

NPWS Documents

Year: 1990

Title: A survey to locate lowland blanket bogs of scientific interest in county Donegal and upland

blanket bogs in counties Cavan, Leitrim and Roscommon

Author: Douglas, C.; Dunnells, D.; Scally, L.; Wyse Jackson, M.

Series: Unpublished report to NPWS

Year: 2011

Title: National survey and assessment of the conservation status of Irish sea cliffs

Author: Barron, S.J.; Delaney, A.; Perrin, P.M.; Martin, J.; O'Neill, F.

Series: Irish Wildlife Manual No. 53

Year: 2013

Title: The status of EU protected habitats and species in Ireland. Volume 2. Habitats assessments

Author: NPWS

Series: Conservation assessments

Year: 2013

Title: National survey of upland habitats (phase 3, 2012-2013), site report no. 14: Slieve League

cSAC (000189), Co. Donegal

Author: Perrin, P.M.; Roche, J.R.; Barron, S.J.; Daly, O.H.; Hodd, R.L.; Muldoon, C.S.; Leydon, K.J.

Series: Unpublished report to NPWS

Year: 2014

Title: Guidelines for a national survey and conservation assessment of upland vegetation and

habitats in Ireland, Version 2.0

Author: Perrin, P.M.; Barron, S.J.; Roche, J.R.; O'Hanrahan, B.

Series: Irish Wildlife Manual No. 79

Year: 2015

Title: Slieve League SAC (site code: 189) Conservation objectives supporting document- coastal

habitats V1

Author: NPWS

Series: Conservation objectives supporting document

Year: 2015

Title: Slieve League SAC (site code: 189) Conservation objectives supporting document- marine

habitats V1

Author: NPWS

Series: Conservation objectives supporting document

Other References

Year: 1997

Title: The BioMar biotope viewer: a guide to marine habitats, fauna and flora in Britain and Ireland

Author: Picton, B.E.; Costello, M.J.

Series: Environmental Science Unit, Trinity College Dublin

Year: 2005

Title: National inventory of sea cliffs and coastal heaths

Author: Browne, A.

Series: Unpublished Report to NPWS

 Year: 2007

Title: Interpretation manual of European Union habitats- EUR 27

Author: European Commission, DG Environment

Series: Reference document

Year: 2012

Title: Intertidal and subtidal reef survey of Slieve League SAC

Author: MERC

Series: Unpublished report to the Marine Institute and NPWS

21 Aug 2015 Version 1 Page 6 of 17

Spatial data sources

Year: Interpolated 2015

Title: 1996 BioMar survey; 2012 reef survey

GIS Operations: Polygon feature classes from marine community types base data sub-divided based on

interpolation of marine survey data. Expert opinion used as necessary to resolve any issues

arising

Used For: 1170, marine community types (maps 3 and 4)

Year: 2005

Title: OSi Discovery series vector data

GIS Operations : High water mark (HWM) and low water mark (LWM) polyline feature classes converted into

polygon feature classes and combined; EU Annex I Saltmarsh and Coastal data erased out if

present

Used For: Marine community types base data (map 4)

Year: 2011

Title: National Survey and assessment of the conservation status of Irish sea cliffs

GIS Operations : Clipped to SAC boundary

Used For: 1230 (map 5)

Year: 2012

Title: National Survey of Upland Habitats - Phase 3

GIS Operations: Habitat dataset for site clipped to SAC boundary. Relevant QI selected and exported to new

dataset. Expert opinion used as necessary to resolve any issues arising

Used For: 4010, 4060, 7130, 8210, 8220 (maps 6, 7, 8, 9, 10)

21 Aug 2015 Version 1 Page 7 of 17

1170 Reefs

To maintain the favourable conservation condition of Reefs in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	The permanent habitat area is stable or increasing, subject to natural processes. See map 3	Habitat area estimated as 616ha from a 1996 BioMar survey (Picton and Costello, 1997) and 2011 reef survey (MERC, 2012)
Distribution	Occurrence	The distribution of reefs remains stable, subject to natural processes. See map 3 for mapped distribution	Based on information from a 1996 BioMar survey (Picton and Costello, 1997) and 2011 reef survey (MERC, 2012)
Community structure	Biological composition	Conserve the following community types in a natural condition: Exposed intertidal reef community; Exposed subtidal community complex. See map 4	The likely area of reef communities was derived from a 1996 BioMar survey (Picton and Costello, 1997) and 2011 reef survey (MERC, 2012). See marine habitats supporting document for further details

21 Aug 2015 Version 1 Page 8 of 17

1230 Vegetated sea cliffs of the Atlantic and Baltic coasts

To maintain the favourable conservation condition of Vegetated sea cliffs of the Atlantic and Baltic coasts in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat length	Kilometres	Area stable, subject to natural processes, including erosion. For sub- sites from desktop survey: Malinmore - 12.84km; Malinbeg - 21.87km. See map 5	Based on data from the Irish Sea Cliff Survey (ISCS) (Barron et al., 2011). Cliffs are linear features and are therefore measured in kilometres. Two sub-sites were identified using a combination of aerial photos and the DCENR helicopter viewer. The length of each cliff was measured (in some cases the cliff was measured in sections) to give a total estimated area of 34.72km within the SAC. The length of cliff likely to be underestimated. See coastal habitats supporting document for further details
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 5	Cliffs are known to occur along the coastline from Glen Bay to Teelin in south Co. Donegal. Both hard and soft cliffs have been noted in this SAC but it is estimated that over 80% of the cliffs are of the hard type (Browne, 2005; Barron et al., 2011). See coastal habitats supporting document for further details
Physical structure: functionality and hydrological regime	Occurrence of artificial barriers	No alteration to natural functioning of geomorphological and hydrological processes due to artificial structures	Based on data from Barron et al. (2011). Maintaining natural geomorphological processes including natural erosion is important for the health of vegetated sea cliffs. Hydrological processes maintain flushes and in some cases tufa formations that can be associated with sea cliffs. Hydrological features such as gullies, streams or cascades were identified by the ISCS as occurring at Malinmore and Malinbeg sub-sites. Sea coastal habitats supporting document for further details
Vegetation structure: zonation	Occurrence	Maintain range of sea cliff habitat zonations including transitional zones, subject to natural processes including erosion and succession	Based on data from Barron et al. (2011). The Annex I habitats Reefs and Alpine and Boreal heaths occur adjacent to sea cliff vegetation at Slieve League. See coastal habitats supporting document for further details
Vegetation structure: vegetation height	Centimetres	Maintain structural variation within sward	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation composition: typical species and sub- communities	Percentage cover at a representative number of monitoring stops	Maintain range of sub- communities with typical species listed in the Irish Sea Cliff Survey (Barron et al., 2011)	See coastal habitats supporting document for further details
Vegetation composition: negative indicator species	Percentage	Negative indicator species (including non-natives) to represent less than 5% cover	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details
Vegetation composition: bracken and woody species	Percentage	Cover of bracken (Pteridium aquilinum) on grassland and/or heath less than 10%. Cover of woody species on grassland and/or heath less than 20%	Based on data from Barron et al. (2011). See coastal habitats supporting document for further details

21 Aug 2015 Version 1 Page 9 of 17

4010 Northern Atlantic wet heaths with Erica tetralix

To restore the favourable conservation condition of Northern Atlantic wet heaths with *Erica tetralix* in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Stable or increasing, subject to natural processes	Northern Atlantic wet heaths with <i>Erica tetralix</i> in this SAC was surveyed and mapped as 324.0ha by the National Survey of Upland Habitats (NSUH) (Perrin et al., 2013, 2014). See Perrin et al. (2014) for detail on how habitat was classified and area calculated
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 6 for gradated distribution map	See Perrin et al. (2014) for mapping methodology and Perrin et al. (2013) for further details of habitat distribution in the SAC
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Relevant nutrients and their natural ranges are yet to be defined. However, nitrogen deposition is noted as being relevant to this habitat in NPWS (2013)
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Further information on vegetation communities associated with this habitat is presented in Perrin et al. (2014) and Perrin et al. (2013) describes the communities recorded in this SAC
Vegetation composition: cross-leaved heath	Occurrence within 20m of a representative number of 2m x 2m monitoring stops	Presence of cross-leaved heath (<i>Erica tetralix</i>) near each monitoring stop	Attribute and target based on Perrin et al. (2014)
Vegetation composition: positive indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of positive indicator species at least 50%	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is also given
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of <i>Cladonia</i> and <i>Sphagnum</i> species, <i>Racomitrium lanuginosum</i> and pleurocarpous mosses at least 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: ericoid species and crowberry	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of ericoid species and crowberry (<i>Empetrum</i> <i>nigrum</i>) at least 15%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: dwarf shrub species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of dwarf shrubs less than 75%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of negative indicator species less than 1%	Attribute and target based on Perrin et al. (2014) where the list of negative indicator species is also given
Vegetation composition: non- native species	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: native trees and shrubs	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of scattered native trees and shrubs less than 20%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: bracken	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of bracken (<i>Pteridium aquilinum</i>) less than 10%	Attribute and target based on Perrin et al. (2014)

21 Aug 2015 Version 1 Page 10 of 17

Vegetation composition: soft rush	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of soft rush (<i>Juncus</i> effusus) less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: Sphagnum condition	Condition of <i>Sphagnum</i> at a representative number of 2m x 2m monitoring stops	Less than 10% of the Sphagnum cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014)
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Less than 33% collectively of the last complete growing season's shoots of ericoids, crowberry (<i>Empetrum nigrum</i>) and bog-myrtle (<i>Myrica gale</i>) showing signs of browsing	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity of a representative number of 2m x 2m monitoring stops	No signs of burning in sensitive areas, into the moss, liverwort or lichen layer or exposure of peat surface due to burning	Attribute and target based on Perrin et al. (2014) where the list of sensitive areas is also presented
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: drainage	Percentage cover in local vicinity of a representative number of monitoring stops	Area showing signs of drainage from heavy trampling, tracking or ditches less than 10%	Attribute and target based on Perrin et al. (2014)
Indicators of local distinctiveness	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order 2015 and/or the red data book (Curtis and McGough, 1988). Perrin et al. (2013) lists rare and notable flora recorded in the upland habitats in the SAC

21 Aug 2015 Version 1 Page 11 of 17

4060 Alpine and Boreal heaths

To restore the favourable conservation condition of Alpine and Boreal heaths in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Alpine and Boreal heaths in this SAC was surveyed and mapped as 97.4ha by the National Survey of Upland Habitats (NSUH) (Perrin et al., 2013, 2014). See Perrin et al. (2014) for detail on how habitat was classified and area calculated
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 7 for gradated distribution map	See Perrin et al. (2014) for mapping methodology and Perrin et al. (2013) for further details of habitat distribution in the SAC
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Relevant nutrients and their natural ranges are yet to be defined. However, nitrogen deposition is noted as being relevant to this habitat in NPWS (2013)
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Further information on vegetation communities associated with this habitat is presented in Perrin et al. (2014) and Perrin et al. (2013) describes the communities recorded in this SAC
Vegetation composition: lichens and bryophytes	Number of species at a representative number of 2m x 2m monitoring stops	Number of bryophyte or non-crustose lichen species present at each monitoring stop is least three	Attribute and target based on Perrin et al. (2014)
Vegetation composition: positive indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of positive indicator species at least 66%	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is also given
Vegetation composition: dwarf-shrub species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of dwarf-shrub species at least 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of negative indicator species less than 10%	Attribute and target based on Perrin et al. (2014) where the list of negative indicator species for this habitat is also given
Vegetation composition: non- native species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: signs of grazing	Percentage of leaves browsed at a representative number of 2m x 2m monitoring stops	Less than 10% collectively of the live leaves of specific graminoids showing signs of grazing	Attribute and target based on Perrin et al. (2014)
Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Less than 33% collectively of the last complete growing season's shoots of ericoids and crowberry (<i>Empetrum nigrum</i>) showing signs of browsing	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning within the habitat	Attribute and target based on Perrin et al. (2014)
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)

21 Aug 2015 Version 1 Page 12 of 17

Indicators of local Occurrence and distribution or This includes species listed in the Flora (Protection) population size population sizes of rare, threatened or scarce species associated with the habitat SAC

21 Aug 2015 Version 1 Page 13 of 17

7130 Blanket bogs (* if active bog)

To restore the favourable conservation condition of Blanket bogs in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Stable or increasing, subject to natural processes	Blanket bogs in this SAC was surveyed and mapped as 1004.9ha (982.3ha active blanket bog and 22.6ha inactive blanket bog) by the National Survey of Upland Habitats (NSUH) (Perrin et al., 2013, 2014). See Perrin et al. (2014) for detail on how habitat was classified and areas calculated. Douglas et al. (1990) also provides information on this habitat in this SAC
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 8 for gradated distribution map	See Perrin et al. (2014) for mapping methodology and Perrin et al. (2013) for further details of habitat distribution in the SAC
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Relevant nutrients and their natural ranges are yet to be defined. However, nitrogen deposition is noted as being relevant to this habitat in NPWS (2013)
Ecosystem function: peat formation	Active blanket bog as a proportion of the total area of Annex I blanket bog habitat	At least 99% of the total Annex I blanket bog area is active bog	Blanket bogs are considered active when "still supporting a significant area of vegetation that is normally peat forming" (EC, 2007)
Ecosystem function: hydrology	Flow direction, water levels, occurrence of drains and erosion gullies	Natural hydrology unaffected by drains and erosion	Drains and erosion gullies can affect the natural hydrologial processes of blanket bog
Community diversity	Abundance of variety of vegetation communities	Maintain variety of vegetation communities, subject to natural processes	Further information on vegetation communities associated with this habitat is presented in Perrin et al. (2014) and Perrin et al. (2013) describes the communities recorded in this SAC
Vegetation composition: positive indicator species	Number of species at a representative number of 2m x 2m monitoring stops	Number of positive indicator species at each monitoring stop is at least seven	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is also given
Vegetation composition: lichens and bryophytes	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of bryophytes or lichens, excluding Sphagnum fallax, at least 10%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: potential dominant species	Percentage cover at a representative number of 2m x 2m monitoring stops	Cover of each of the potential dominant species less than 75%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: negative indicator species	Percentage cover at a representative number of 2m x 2m monitoring stops	Total cover of negative indicator species less than 1%	Attribute and target based on Perrin et al. (2014) where the list of negative indicator species for this habitat is also given
Vegetation composition: non- native species	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: native trees and scrub	Percentage cover in local vicinity of a representative number of monitoring stops	Cover of scattered native trees and shrubs less than 10%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: <i>Sphagnum</i> condition	Condition of <i>Sphagnum</i> at a representative number of 2m x 2m monitoring stops	Less than 10% of the Sphagnum cover is crushed, broken and/or pulled up	Attribute and target based on Perrin et al. (2014)

21 Aug 2015 Version 1 Page 14 of 17

Vegetation structure: signs of browsing	Percentage of shoots browsed at a representative number of 2m x 2m monitoring stops	Last complete growing season's shoots of ericoids, crowberry (<i>Empetrum nigrum</i>) and bog-myrtle (<i>Myrica gale</i>) showing signs of browsing collectively less than 33%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: burning	Occurrence in local vicinity of a representative number of monitoring stops	No signs of burning in sensitive areas, into the moss, liverwort or lichen layer or exposure of peat surface due to burning	Attribute and target based on Perrin et al. (2014) where the list of sensitive areas is also presented
Physical structure: disturbed bare ground	Percentage cover at, and in local vicinity of, a representative number of 2m x 2m monitoring stops	Cover of disturbed bare ground less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: drainage	Occurrence in local vicinity of a representative number of monitoring stops	Area showing signs of drainage from heavy trampling, tracking or ditches less than 10%	Attribute and target based on Perrin et al. (2014)
Physical structure: erosion	Occurrence in local vicinity of a representative number of monitoring stops	Less than 5% of the greater bog mosaic comprises erosion gullies and eroded areas	Attribute and target based on Perrin et al. (2014). The greater bog mosaic incorporates the blanket bog itself and associated vegetation types as well as non-vegetation cover types that appear to have been derived from former blanket bog including gravel, rock and running water
Indicators of local distinctiveness	Occurrence and population size	No decline in distribution or population sizes of rare, threatened or scarce species associated with the habitat	This includes species listed in the Flora (Protection) Order 2015 and/or the red data book (Curtis and McGough, 1988). Perrin et al. (2013) lists rare and notable flora recorded in the upland habitats in the SAC

21 Aug 2015 Version 1 Page 15 of 17

8210 Calcareous rocky slopes with chasmophytic vegetation

To maintain the favourable conservation condition of Calcareous rocky slopes with chasmophytic vegetation in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Calcareous rocky slopes with chasmophytic vegetation was surveyed and mapped as 1.9ha by the National Survey of Upland Habitats (NSUH) (Perrin et al., 2013, 2014). See Perrin et al. (2014) for detail on how habitat was classified and area calculated
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 9 for gradated distribution map	See Perrin et al. (2014) for mapping methodology and Perrin et al. (2013) for further details of habitat distribution in the SAC
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Relevant nutrients and their natural ranges are yet to be defined. However, nitrogen deposition is noted as being relevant to this habitat in NPWS (2013)
Vegetation composition: positive indicator fern and Saxifraga species	Number of species in local vicinity of a representative number of monitoring stops	Number of ferns and Saxifraga indicators at each monitoring stop at least one	Attribute and target based on Perrin et al. (2014)
Vegetation composition: positive indicator species	Number of species in local vicinity of a representative number of monitoring stops	Number of positive indicator species at each monitoring stop at least three	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is also given
Vegetation composition: non- native species	Percentage cover in local vicinity of a representative number of monitoring stops	Proportion of vegetation composed of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: bracken, native trees and scrub	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of bracken (<i>Pteridium aquilinum</i>), native trees and scrub less than 25%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: grazing and browsing	Percentage of leaves/ shoots grazed/browsed in local vicinity of a representative number of monitoring stops	Live leaves of forbs and shoots of dwarf shrubs showing signs of grazing or browsing collectively less than 50%	Attribute and target based on Perrin et al. (2014)
Indicators of local distinctiveness	Occurrence and population size	population sizes of rare, threatened or scarce	This includes species listed in the Flora (Protection) Order 2015 and/or the red data book (Curtis and McGough, 1988). Perrin et al. (2013) lists rare and notable flora recorded in the upland habitats in the SAC

21 Aug 2015 Version 1 Page 16 of 17

8220 Siliceous rocky slopes with chasmophytic vegetation

To maintain the favourable conservation condition of Siliceous rocky slopes with chasmophytic vegetation in Slieve League SAC, which is defined by the following list of attributes and targets:

Attribute	Measure	Target	Notes
Habitat area	Hectares	Area stable or increasing, subject to natural processes	Siliceous rocky slopes with chasmophytic vegetation was surveyed and mapped in this SAC as 7.6ha by the National Survey of Upland Habitats (NSUH) (Perrin et al., 2013, 2014). See Perrin et al. (2014) for detail on how habitat was classified and area calculated
Habitat distribution	Occurrence	No decline, subject to natural processes. See map 10 for gradated distribution map	See Perrin et al. (2014) for mapping methodology and Perrin et al. (2013) for further details of habitat distribution in the SAC
Ecosystem function: soil nutrients	Soil pH and appropriate nutrient levels at a representative number of monitoring stops	Maintain soil nutrient status within natural range	Relevant nutrients and their natural ranges are yet to be defined. However, nitrogen deposition is noted as being relevant to this habitat in NPWS (2013)
Vegetation composition: positive indicator species	Number of species at a representative number of monitoring stops	Number of positive indicator species present in vicinity of each monitoring stop is at least one	Attribute and target based on Perrin et al. (2014) where the list of positive indicator species for this habitat is also given
Vegetation composition: non-native species	Percentage cover in local vicinity of a representative number of monitoring stops	Proportion of vegetation composed of non-native species less than 1%	Attribute and target based on Perrin et al. (2014)
Vegetation composition: bracken (Pteridium aquilinum), native trees and scrub	Percentage cover in local vicinity of a representative number of monitoring stops	Total cover of bracken (<i>Pteridium aquilinum</i>), native trees and scrub less than 25%	Attribute and target based on Perrin et al. (2014)
Vegetation structure: grazing and browsing	Percentage of leaves/ shoots grazed/browsed in local vicinity of a representative number of monitoring stops	Live leaves of forbs and shoots of dwarf shrubs showing signs of grazing or browsing collectively less than 50%	Attribute and target based on Perrin et al. (2014)
Indicators of local distinctiveness	Occurrence and population size	population sizes of rare, threatened or scarce	This includes species listed in the Flora (Protection) Order 2015 and/or the red data book (Curtis and McGough, 1988). Perrin et al. (2013) lists rare and notable flora recorded in the upland habitats in the SAC

21 Aug 2015 Version 1 Page 17 of 17

