

SLIEVE GULLION SAC

UK0030277

CONSERVATION OBJECTIVES

Document Details

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Version	Date	Summary of Changes	Initials
V1.0	June 2013	Internal working document	PC
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V2.0	01.04.2015	Effective date of Version 2	PC
V2.1	11.10.2017	Removed wording 'excluding recently burnt areas' from bare peat target in all relevant Annex tables	PMC



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1. INTRODUCTION

EU Member States have a clear responsibility under the Habitats and Birds Directives¹ to ensure that all habitats and species of Community Interest are maintained or restored to Favourable Conservation Status (FCS). Natura 2000 sites have a crucial role to play in achieving this overall objective since they are the most important core sites for these species and habitats. Each site must therefore be managed in a way that ensures it contributes as effectively as possible to helping the species and habitats for which it has been designated reach a favourable conservation status within the EU.

To ensure that each Natura 2000 site contributes fully to reaching this overall target of FCS, it is important to set clear conservation objectives for each individual site. These should define the desired state, within that particular site, of each of the species and habitat types for which the site was designated.

Once a site has been included in the Natura 2000 network, Member States are required to implement, on each site, the necessary conservation measures which correspond to the ecological requirements of the protected habitat types and species of Community Interest present, according to Article 6.1 of the Habitats Directive. They must also prevent any damaging activities that could significantly disturb those species and habitats (Article 6.2) and to protect the site from new potentially damaging plans and projects likely to have a significant effect on a Natura 2000 site (Article 6.3, 6.4).

Conservation measures can include both site-specific measures (i.e. management actions and/or management restrictions) and horizontal measures that apply to many Natura 2000 sites over a larger area (e.g. measures to reduce nitrate pollution or to regulate hunting or resource use).

In Northern Ireland, Natura 2000 sites are usually underpinned by the designation of an Area of Special Scientific Interest (ASSI) under the Environment (NI) Order 2002 (as amended).

¹ 92/43/EEC and 2009/147/EC (codified version of Directive 79/409/EEC as amended)

2. ROLE OF CONSERVATION OBJECTIVES

Conservation Objectives have a role in

- Conservation Planning and Management – guide management of sites, to maintain or restore the habitats and species in favourable condition
- Assessing Plans and Projects, as required under Article 6(3) of the Habitats Directive - Habitats Regulations Assessments (HRA) are required to assess proposed plans and projects in light of the site's conservation objectives.
- Monitoring and Reporting – Provide the basis for assessing the condition of a feature, the factors that affect it and the actions required.

3. DEFINITION OF FAVOURABLE CONSERVATION STATUS

Favourable Conservation Status is defined in Articles 1(e) and 1(i) of the Habitats Directive:

The conservation status of a natural habitat is the sum of the influences acting on it and its typical species that may affect its long-term natural distribution, structure and functions as well as the long term survival of its typical species. The conservation status of a natural habitat will be taken as favourable when:

- Its natural range and areas 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 as defined in Article 1(i).

For species, favourable conservation status is defined in Article 1(i) as 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 population on a long term basis.

3.1 DEFINITION OF FAVOURABLE CONDITION

Favourable Condition is defined as “the target condition for an interest feature in terms of the abundance, distribution and/or quality of that feature within the site”.

The standards for favourable condition (Common Standards) have been developed by JNCC and are applied throughout the UK. Achieving Favourable Condition on individual sites will make an important contribution to achieving Favourable Conservation Status across the Natura 2000 network.

4. SITE INFORMATION

COUNTY: ARMAGH

GRID REFERENCE: J 023210

AREA: 612.13 ha

5. SUMMARY SITE DESCRIPTION

Slieve Gullion is a compact upland formed by volcanic activity in Tertiary times, some 60 million years ago. It is situated in south Armagh about 5 miles southwest of Newry, and at a height of 573m, it represents a prominent landscape feature. The area is important geologically, representing the finest example of a Tertiary igneous centre in Ireland and it is also among the best topographic expressions of a ring-dyke system in the British Isles.

Slieve Gullion SAC supports a range of upland habitats and associated transitional communities, especially to the north of the site, where the upland heath grades downslope into lowland heaths, acid grasslands and basin fens.

Annex 1 habitat European dry heath is extensive over the area and represents one of the largest expanses of this habitat in Northern Ireland outside the Mourne Mountains. The community is mostly of the *Calluna vulgaris*/*Erica cinerea* and *Calluna vulgaris*/*Vaccinium myrtillus* types, but includes *Ulex gallii*/*Erica cinerea* dry heath on the lower slopes. The area supports a number of other vegetation communities, including wet heath and blanket bog on the summit and upper slopes, wet and dry grassland communities, and transition mires and quaking bogs.

Further details of the site are contained in the ASSI Citation and Views About Management statement, which are available on the NIEA website (www.doeni.gov.uk/niea).

5.1 BOUNDARY RATIONALE

The boundary has been drawn to include all areas of dry, wet, upland and lowland heath communities, together with associated semi-natural habitats around the summit of Slieve Gullion. It is generally well-defined, and excludes the more degraded heathland/grassland mosaics, improved agricultural land and forestry.

The forests have been planted on the lower slopes of the hill and form the boundary around more than 50% of the site. The boundaries are generally clearly defined as stone walls and fences, but there are some areas around the south of the SAC where only the edge of the trees demarcates the boundary with no fence-line. Many of the fields to the north and west of the site have been reclaimed from lowland heath in recent years. Although the majority of boundaries are stock proof, there are clearly areas where stock are free to roam from the heath into the forest and back again.

6. SAC SELECTION FEATURES

Feature type	Feature	Global Status	Size/ extent/ population
Habitat	European dry heaths	B	490 ha
Habitat	Northern Atlantic wet heaths with <i>Erica tetralix</i>	D	30.6 ha
Habitat	Active blanket bogs	D	30.6 ha
Habitat	Transition mires and quaking bogs	D	0.8 ha

Table 1. List of SAC selection features. Those with global status A-C will be referred to in ANNEX I.

The global status is an expert judgement of the overall value of the site for the conservation of the relevant Annex I habitat. Sites have been graded A, B or C - in the UK these gradings have been interpreted as follows:

A - Sites holding outstanding examples of the habitat in a European context.

B - Sites holding excellent stands of the habitat, significantly above the threshold for SSSI/ASSI notification but of somewhat lower value than grade A sites.

C - Examples of the habitat which are of at least national interest (i.e. usually above the threshold for SSSI/ASSI notification on terrestrial sites) but not significantly above this. These habitats are not the primary reason for SACs being selected.

D - Habitat present but not of sufficient extent or quality to merit listing as SAC feature.

There is therefore a distinction between the principal features for which sites have been selected (those graded A or B) and those which are only of secondary interest (those graded C). This is a useful distinction but it is important to note that all three grades are qualifying SAC interest features.

Click [here](#) to go to the Natura 2000 Standard Data Form for Slieve Gullion SAC.

6.1 ASSI SELECTION FEATURES

Slieve Gullion ASSI

Feature type	Feature	Size/ extent/ population
Habitat	Dry Heath	490 ha
Habitat	Fens - Four small basin fens that are very 'natural' and rich in wetland species, with a number of associated fen communities.	Combined area 4.5 ha
Species	Breeding Bird Assemblage	
Species	Invertebrate assemblage	
Earth Science	Tertiary Igneous series - three sub-sites within Slieve Gullion SAC are of special scientific interest for their Tertiary igneous rocks. These are; Slieve Gullion – Crag Sarah Daly's Bridge – Crag Forest Quarry – Quarry	

Table 2. List of ASSI features.

7. CONSERVATION OBJECTIVES

The *Conservation Objective* for this site is:

To maintain (or restore where appropriate) the European Dry Heaths to favourable condition.

For each SAC feature, there are a number of component objectives which are outlined in the table below. These include a series of attributes, measures and targets which form the basis of *Condition Assessment*. The results of this will determine whether the feature is in favourable condition or not. The feature attributes and measures are found in the attached annex.

8. SAC SELECTION FEATURE OBJECTIVE REQUIREMENTS

Feature	Global Status	Component Objectives
European dry heaths	B	Maintain the extent of existing European dry heath vegetation.
		Maintain and enhance the quality of the European dry heath community types.
		Seek to expand the extent of the dry heath communities into degraded areas of species-poor, dry acid grassland.
		Maintain the diversity and quality of other habitats of conservation interest, especially where these exhibit natural transitions to the dry heath.
		Seek nature conservation management over suitable areas immediately outside the SAC where there may be the potential for dry heath rehabilitation.

9. ASSI FEATURE OBJECTIVE REQUIREMENTS

Feature	Component Objective
Dry Heath	See SAC Selection Feature Objective Requirements table.
Fens	Maintain the extent and quality of the existing lowland basin fen vegetation and ensure fen community types are also maintained.
Breeding Bird Assemblage	To be finalised.
Invertebrate assemblage	To be finalised.
Tertiary igneous rocks	Maintain the extent of each of the three sub-sites that display nationally important exposures of Tertiary igneous rocks and access to them subject to natural processes.

10. MANAGEMENT CONSIDERATIONS

Ownership

About 300 ha, almost 50% of Slieve Gullion SAC, is owned by Forest Service, DARD. Their ownership encompasses the lands to the south of the site. Until recently, Northern Ireland Electricity owned much of the remainder, but it has recently been sold back to the original owners or their descendants. In total, there are 30 landowners with land lying within the SAC, mainly in the enclosed lands around the periphery. An additional 20 individuals have shooting or mineral rights. This complex pattern of ownership and grazing rights together with the added complication of shooting rights makes a unified approach to site management more difficult.

Much of the SAC is lightly grazed by sheep, although in the past, some areas were more intensely managed. Occasional burning of the vegetation has taken place.

11. MAIN THREATS, PRESSURES AND ACTIVITIES WITH IMPACTS ON THE SITE

Both on-site and off-site activities can potentially affect SAC/ASSI features. The list below is not exhaustive, but deals with the most likely factors that are either affecting Slieve Gullion, or could affect it in the future.

Although **European Dry Heaths** is the qualifying SAC feature, factors affecting ASSI features are also considered.

NOTE - Carrying out any of the Notifiable Operations listed in the ASSI schedule could affect the site.

Grazing

Heavy grazing can lead to changes in species composition, and ultimately, conversion from heath to grassland. Within much of the SAC, the heathland is only very lightly grazed by sheep. The heathland communities are therefore largely in favourable condition. However, overgrazing does occur, particularly in recently burnt areas and on the more grassy slopes surrounding the old farmstead to the northeast of the area. This concentrated selective grazing by sheep is generally fairly restricted in extent, but the heathland communities affected are degraded and in unfavourable condition.

Overgrazing is a consequence of a number of factors that are extremely difficult to control. These include common grazing, winter grazing, which is particularly damaging to Heather, lack of shepherding and the difficulties of monitoring sheep numbers over extensive areas of upland. As much of the upland area is completely unenclosed, sheep can roam freely from one land ownership to another. In addition, in some places there is no stock-proof boundary between the SAC and surrounding rough pasture, with the result that stock from surrounding lands (mostly sheep, but some horses and cattle) can graze the SAC.

ACTION: Establish a sustainable stocking density within each management unit of the Slieve Gullion SAC and ensure that set grazing prescriptions are strictly adhered to. Continue monitoring of the heathland communities to ensure that prescriptions are allowing degraded heathland communities to recover towards favourable condition. If necessary, establish some form of shepherding over the unenclosed upland parts of the site in order to spread the grazing pressure more evenly.

Burning

Burning is sometimes used as a management tool to increase the structural and floristic diversity of dry heath, or to increase the carrying capacity for grouse or livestock. However, excessive or badly managed burning can lead to the deterioration of heathland communities, with a reduction in the cover of mosses and ericaceous species, and a corresponding increase in the cover of sedges, *Molinia caerulea* and *Nardus stricta*. In addition, structural diversity is reduced. High levels of grazing can exacerbate the effects, as sheep tend to selectively graze the young ericoid shoots, thus inhibiting regeneration.

Burning has taken place within the SAC, with some quite extensive areas of past burning being clearly identified. Sheep appear to be concentrating much of their grazing pressure in some of the recently burnt areas. In general, it is recommended that burning should only be carried out in circumstances where there is a clearly identified conservation need. Alternative methods of diversifying the vegetation should be considered first (e.g. mowing/flailing).

ACTION: Through liaison and management agreements with landowners ensure that any burning within the SAC is carefully controlled and monitored.

Scrub/Bracken Encroachment

There are many small pockets of bracken associated with the lower slopes around the periphery of Slieve Gullion SAC, as well as localised pockets of bracken on some of the upper slopes. There is also some limited scrub development – mainly *Ulex europaeus* associated with areas of disturbance. Any further scrub or bracken encroachment into the heathland communities is undesirable.

ACTION: Monitor further scrub/bracken encroachment (where it occurs) and take remedial action if required. Remove any invasive exotic species, such as *Rhododendron* as a matter of urgency.

Fly-tipping

There is an extensive area of severe fly-tipping in the northern section of the SAC. This dumping appears to be carried out by the landowner as the only access to the dump site is along a private track. Dumped items include all types of farm-yard waste (including fallen animals), TVs, washing machines and cars. In other parts of the site, there is currently no evidence of fly tipping. However, it is possible that fly tipping may occur along the edge of Ballard Road into the fen areas, i.e. where the SAC boundary runs along the edge of this minor road.

ACTION: All material from the large fly-tipping site in the northern area of the SAC should be removed or buried and any further dumping should be prevented. It may be necessary to reinstate heath vegetation over the area. If any fly-tipping starts to occur along the minor Ballard Road or anywhere else on the site, remove all evidence as soon as possible to prevent any further incidences.

Quarrying

Although there is no current quarrying, some small-scale quarrying has previously taken place. However, there are a number of mineral rights held by private and state organisations in the area.

ACTION: There should be no commercial quarrying within the Slieve Gullion SAC. However, it may be necessary to remove some rock from the face of the Forest Quarry to ensure the geological features of interest remain exposed.

Land Reclamation

Much of the lower *Ulex gallii* dry heaths have been lost to reclamation in recent years. The remaining *Ulex gallii* heath is an important component of the SAC. In addition, some of the dry heaths further up-slope have also been reclaimed and afforested.

ACTION: Through liaison and management agreements with landowners ensure there is no further reclamation of the lowland or upland heaths within the SAC.

Recreation

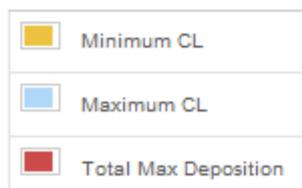
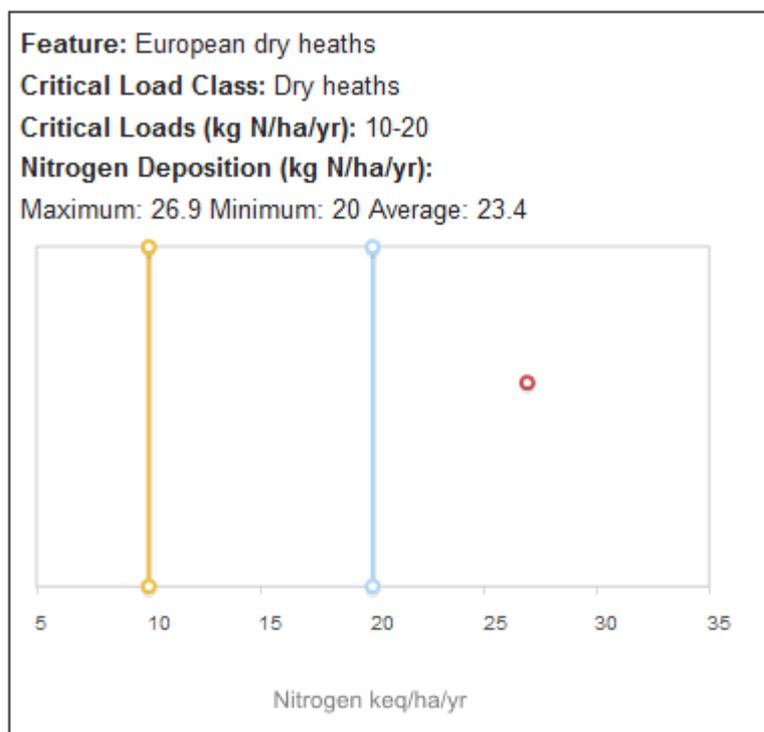
An increased interest in hill walking within the Northern Ireland population together with increased tourist activity in the South Armagh area, is beginning to put pressure on the footpath that runs up to the South Cairn. The path itself consists of exposed bare peat in many places with localised gully erosion and the surrounding vegetation along the edges of the path are beginning to be impacted.

Ideally, paths should be pitched to allow for sustainable levels of recreational activity without having an adverse affect on the heathland communities.

ACTION: Ensure that the impact of hill walking in Slieve Gullion SAC is minimised. Footpath creation and maintenance is of paramount importance and there is also a need to develop and promote pathways in areas that are not highly sensitive to disturbance.

Nitrogen Deposition

Excess nitrogen deposition can favour the growth of competitive plants and lead to changes in ecosystem structure or function and to a reduction in biodiversity. National scale studies show the potential adverse effects of excess nitrogen on natural and semi-natural habitats to be widespread across the UK. Lower and upper critical loads have been calculated for Slieve Gullion SAC.



(Source: Air Pollution Information System (APIS) website- www.apis.ac.uk)

ACTION: Seek to maintain or where necessary, restore concentrations and deposition of air pollutants to at or below the site-relevant critical load.

Changes to surrounding land use

Any changes in local land-use e.g. agricultural intensification, drainage works and development) may be detrimental to the SAC.

Action: Reduce the risk of surrounding agricultural intensification by encouraging the adjacent owner/occupiers to enter into agri-environment schemes. Use Habitats Regulations Assessments (HRAs), through the planning process, to minimise any development risks adjacent to the SAC.

Climate Change

Northern Ireland faces changes to its climate over the next century. Indications are that we will face hotter, drier summers, warmer winters and more frequent extreme weather events.

ACTION: When developing SAC management plans, the likely future impacts of climate change should be considered and appropriate changes made.

12. MONITORING

Monitoring of SACs takes place using two monitoring techniques.

Site Integrity Monitoring (SIM) is carried out to ensure compliance with the ASSI/ SAC Schedule. The most likely processes of change will either be picked up by SIM (e.g. dumping, burning, turf cutting, grazing etc.) or will be comparatively slow (e.g. gradual degradation of the habitat).

These longer-term changes will be picked up by monitoring of the feature via **Site Condition Assessment** - this is carried out on a rolling basis to pick up subtle changes in the condition of the feature.

The method for Site Condition Assessment was agreed by the relevant JNCC-led Lead Co-ordination Network although the methodology has been modified to reflect individual site attributes in Northern Ireland.

12.1 MONITORING SUMMARY

1. *Monitor the integrity of the site (SIM or Compliance Monitoring)*

Complete boundary survey to ensure integrity of site and that any fencing is still intact. Ensure that there has been no dumping or burning carried out within the ASSI. This SIM should be carried out once a year.

2. *Monitor the condition of the site (Condition Assessment)*

Monitor the key attributes for each of the SAC selection features. This will detect if the features are in favourable condition or not. See Annex I.

The favourable condition table provided in Annex 1 is intended to supplement the conservation objectives only in relation to management of established and ongoing activities and future reporting requirements on monitoring condition of the site and its features. It does not by itself provide a comprehensive basis on which to assess plans and projects, but it does provide a basis to inform the scope and nature of any Habitats Regulations Assessment (HRA) that may be needed. It should be noted that completion of a HRA is a separate activity to condition monitoring, requiring consideration of issues specific to individual plans or projects.

13. REFERENCES

Cooper, A., McCann, T. and Rogers, D. (2009). Northern Ireland Countryside Survey 2007: Broad Habitat Change 1998-2007. Northern Ireland Environment Agency Research and Development Series No.09/06

Department of the Environment for Northern Ireland (2003). Northern Ireland Habitat Action Plan – Upland Heathland.

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European Commission (2001). Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.

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ANNEX I

Feature 1 (SAC) - European dry heath (Status B)

(* = Primary attribute. One failure among primary attribute = unfavourable condition)

Attributes	Targets	Method of Assessment	Comments
* Area of dry heath	Maintain the extent of dry heath at 490 ha.	Visual estimate in 2x2 m plots <u>and</u> across the dry heath using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Note that it may be possible to extend dry heath communities, provided this is into degraded areas and does not encroach into other habitats of scientific interest.
* Heath community diversity	Maintain the presence of the dry heath communities H7, H8, H10 etc. as established at base line survey.	Visual estimate in 2x2 m plots.	Repeat monitoring of plots using GPS should indicate whether dry heath communities have changed or been lost.
* Area of mosaic communities and associated semi-natural habitats	Maintain associated mosaic communities and semi-natural habitats.	Visual estimate in 2x2 m plots <u>and</u> across the ASSI using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Repeat monitoring of plots using GPS should indicate whether mosaics and associated habitats have changed or been lost.
Dwarf-shrub height	Average ericoid height should be 15–35cm with at	Visual estimate in 2x2 m plots.	On some areas of dry heath (especially on gentle slopes), the ericoid age structure will largely reflect

	least 25% of the dry heath in the late mature/degenerate growth phase (greater than 35cm).		recent burning patterns. However, in dry heath, burning should only be carried out occasionally under carefully controlled and monitored circumstances. A varied heather age structure is reflected in the height of heather.
* Bare peat, or ground covered by algal mats (% cover)	Bare peat etc. should occupy less than 2% of the dry heath surface overall.	Visual estimate in 2x2 m plots.	Bare peat (NOT exposed rock) or peat carpeted by <i>Polytrichum</i> spp., <i>Campylopus</i> spp. crust forming lichens or algal mats can occur as a consequence of constant burning and/or grazing. Bare peat here represents bare peat etc. within the dry vegetation rather than naturally eroded surfaces where exposed rock can form a natural part of the dry heath community.
* Ericaceous cover (% cover)	Dwarf-shrub cover should be greater than 75% over at least 75% of the dry heath community; and Mean dwarf-shrub cover should be greater than 75%	Visual estimate in 2x2 m plots.	
* Ericoid diversity	At least two species of dwarf-shrub at least present in 90% of plots.	Visual estimate in 2x2 m plots.	Ericoid (dwarf-shrub species) include <i>Calluna vulgaris</i> , <i>E. cinerea</i> , <i>Vaccinium myrtillus</i> , <i>Erica tetralix</i> , <i>Ulex gallii</i> , <i>Empetrum nigrum</i> and <i>Myrica gale</i> .
* Cover of <i>Ulex gallii</i> (% cover)	<i>Ulex gallii</i> cover should be less than 50% in plots within H8 stands.	Visual estimate in 2x2 m plots.	Mean percentage cover should be assessed for stands of H8 only – i.e. exclude plots in other heath communities from the calculations. Stands of H8 are generally restricted to the south-east of Northern Ireland.
* Cover of graminoids (% cover)	Total graminoid cover should be less than 33%.	Visual estimate in 2x2 m plots.	Include true grasses, sedges, and rushes in this assessment. <i>Nardus stricta</i> , <i>Deschampsia flexuosa</i> ,

			<i>Juncus squarrosus</i> or other graminoids should not dominate over other species.
* Frequency and % cover of bryophytes and bushy lichens (esp <i>Cladonia</i> spp.) (DAFOR and % cover)	<p>Bryophytes (excluding <i>Polytrichum</i> spp. and <i>Campylopus</i> spp. on bare ground) and/or <i>Cladonia</i> species should be at least frequent.</p> <p>At least frequent is equivalent to greater than 41% occurrence in recorded plots.</p> <p>Combined mean cover should be greater than 5%.</p>	Visual estimate in 2x2 m plots.	Generally only bryophytes (mosses and liverworts) figure in this assessment, but occasionally bushy lichens can also be a prominent feature of the dry heath vegetation.
* Frequency and % cover of scrub/tree encroachment on dry heath communities (DAFOR and % cover)	<p>Scrub/tree encroachment should be no more than occasional over the dry heath community.</p> <p>No more than occasional is equivalent to less than 40% occurrence in recoded plots.</p> <p>Mean cover should be less than 5%.</p>	Visual estimate within a 10 m radius of plots <u>and</u> across the feature using a combination of aerial photographs and Condition Assessment structured walk.	Scrub encroachment should be checked using a combination of aerial photographs and Condition Assessment. Include invasive alien species in addition to <i>Betula pubescens</i> , <i>Prunus spinosa</i> , <i>Rubus</i> spp. Invasive exotic species such as <i>Rhododendron ponticum</i> should be removed immediately. Exclude <i>Ulex europaeus</i> (see below)

<p>* Cover of Gorse <i>Ulex europaeus</i> (% cover)</p>	<p>Gorse (<i>Ulex europaeus</i>) cover should be less than 5%.</p> <p>During repeat surveys, Gorse cover should not exceed that of the baseline survey.</p>	<p>Visual estimate in 2x2 m plots <u>and</u> across the feature using a combination of aerial photographs and Condition Assessment structured walk.</p>	<p>Although a natural component of heath communities, Gorse can become invasive under both low and high grazing pressures.</p> <p>It is important to assess whether the relative quantities present in the site are increasing.</p>
<p>* Cover of Bracken (<i>Pteridium aquilinum</i>) encroachment (% cover)</p>	<p>Bracken cover less than 10% in dense canopy.</p> <p>During repeat surveys, Bracken cover should not exceed that of the baseline survey.</p>	<p>Visual estimate in 2x2 m plots <u>and</u> across the feature using a combination of aerial photographs and Condition Assessment structured walk.</p>	<p>Although a natural component of heath communities, Bracken can become invasive under both low and high grazing pressures.</p> <p>It is important to assess whether the relative quantities present in the site are increasing.</p>
<p>* Frequency and cover of undesirable agricultural grasses and weeds (DAFOR and % cover)</p>	<p>None of the following should be more than rare: <i>Cirsium arvense</i>, <i>C. vulgare</i>, <i>Senecio jacobaea</i>, <i>Urtica dioica</i>, <i>Plantago major</i>, <i>Phleum pratense</i>, <i>Trifolium repens</i>, <i>Holcus lanatus</i> and <i>Lolium perenne</i></p> <p>No more than rare is equivalent to less than 20% occurrence in recorded plots.</p>	<p>Visual estimate in 2x2 m plot.</p>	

	Combined mean cover of agricultural grasses and weeds less than 1%.		
* Management - Grazing (% cover)	<p>Signs of moderate or heavy grazing should occupy less than 5% of the dry heath vegetation.</p> <p>The frequency of droppings, the extent of poaching, uprooting of dwarf shrubs and invasion by <i>Juncus squarrosus</i> etc. indicate moderate and heavy grazing where any one of the above is recorded as more than occasional.</p>	Visual estimate in 2x2 m plots.	
* Management - Burning (% cover)	Signs of recent burning should occupy less than 5% of the dry heath vegetation.	Visual estimate in 2x2 m plots <u>and</u> across feature using a combination of aerial photographs, SIM and Condition Assessment structured walk.	
Frequency and cover of erosion features associated with human impacts. (DAFOR and % cover)	No gully erosion or bare rock associated with more concentrated human impacts (ATV tracks or recreational activities). Man	Visual estimate in 2x2 m plots.	The extent of man induced erosion should be monitored using a combination of aerial photographs and Condition Assessment. Erosion is a natural feature of high mountain slopes. However, where natural erosion is exacerbated by human activity, mainly hill

	induced/enhanced erosion should occupy less than 2% of the total area of dry heath other than very localised instances.		walking, the heath will not be in favourable condition, except where such erosion is very limited in nature.
Herb diversity	Herbs (excluding negative indicators) at least frequent. At least frequent is equivalent to greater than 41% occurrence in recorded plots.	Visual estimate in 2x2 m plots.	

Frequency -

1-20% = Rare

21-40% = Occasional

41- 60% = Frequent

> 60% = Constant