HOLLYMOUNT SAC
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CONSERVATION OBJECTIVES

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1. INTRODUCTION

EU Member States have a clear responsibility under the Habitats and Birds Directives[1] 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: DOWN

GRID REFERENCE: J464438

AREA: 49.95 ha

5. SUMMARY SITE DESCRIPTION

Hollymount, just south of Downpatrick, Co. Down is comprised of low-lying, regularly flooded marshland surrounded by drumlins. Swamp carr woodland has developed in the wetland and is characterised by dense, mature Alder *Alnus glutinosa* and Grey Willow *Salix cinerea* with Reed Canary-grass *Phalaris arundinacea* and the Greater Pond-sedge *Carex riparia* dominating the ground flora. Oak woodland has also developed on a large drumlin within the site.

Over much of this Oak *Quercus* sp. dominates the canopy with frequent Sycamore *Acer pseudoplatanus* and Beech *Fagus sylvatica* and occasional Ash *Fraxinus excelsior*. Otter *Lutra lutra* is present on the site and fluctuating water-filled ditches represent the principal sites for Water Violet *Hottonia palustris* in Northern Ireland.

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 the existing semi-natural wet woodland NNR. In addition to this, some wetland areas with the potential to develop into carr woodland have been included and areas of broad-leaved semi-natural estate woodland, notably the drumlin Oak wood.

6. SAC SELECTION FEATURES

Feature type	Feature	Global Status	Size/ extent/ population
Habitat	Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion alvae*)	B	8.7 ha
Habitat	Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	C	20 ha
Species	Otter *Lutra lutra*	D	Present

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 thresholdfor 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 Hollymount SAC.

6.1 ASSI SELECTION FEATURES

Hollymount ASSI

Feature Type	Feature	Size/ extent/ population
Habitat	Wet Woodland	8.7 ha
Habitat	Oakwood	20 ha
Species	Water Violet *Hottonia palustris*	

Table 2. List of ASSI features.

7. CONSERVATION OBJECTIVES

The ***Conservation Objective*** for this site is:

To maintain (or restore where appropriate) the

- **Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion alvae*)**
- **Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles**

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

SAC Feature	Global Status	Component Objective
Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion alvae*)	B	Maintain and expand the extent of existing swamp woodland. (There is an area of wetland and damp grassland which have the potential to develop into carr woodland)
		Maintain and enhance swamp woodland species diversity and structural diversity
		Maintain the diversity and quality of habitats associated with the swamp woodland, e.g. fen, swamp, especially where these exhibit natural transition to swamp woodland.
		Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation.
		Seek nature conservation management over suitable areas immediately outside the ASSI where there may be potential for woodland expansion.
Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles	C	Maintain the extent of existing Oak woodland.
		Maintain and enhance Oak woodland species diversity and structural diversity.
		Maintain the diversity and quality of habitats associated with the Oak woodland, e.g. fen, swamp, grasslands, scrub, especially where these exhibit natural transition to Oak woodland
		Seek nature conservation management over adjacent forested areas outside the ASSI where there may be potential for woodland rehabilitation.
		Seek nature conservation management over suitable areas immediately outside the ASSI where there may be potential for woodland expansion.

9. ASSI FEATURE OBJECTIVE REQUIREMENTS

ASSI Feature	Component Objective
Wet Woodland	See SAC SelectionFeature Objective Requirements table.
Oakwood	See SAC SelectionFeature Objective Requirements table.
Water Violet *Hottonia palustris*	Maintain and expand the current population of Water Violet *Hottonia palustris*

10. MANAGEMENT CONSIDERATIONS

Ownership
Forest Service owns the entire area, with areas not included within the ASSI largely in commercial forest production. The area of Wet Alder Swamp woodland managed by NIEA in conjunction with Forest Service is a National Nature Reserve.

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 Hollymount, or could affect it in the future. Although Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion alvae*) and Old sessile oak woods with *Ilex* and *Blechnum* are the qualifying SAC features, factors affecting ASSI features are also considered.

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

Woodland Clearance
There are small pockets of clearance outside the Nature Reserve area. This has been Forest Service-initiated prior to small scale underplanting of Broad-leaves.
ACTION: Regular liaison with Forest Service is likely to alleviate any conflicts of interest in this area.

Timber Removal
There is some evidence of timber removal in the drumlin wood. Dead wood should be left in situ if safe or practical to do so. This provides valuable habitat for fungi, invertebrates, etc. Removal of wood for firewood should be discouraged.

ACTION: Liaison with Forest Service is key. There should be no conflict of interest in this area.

Invasion by exotics

Exotic species recorded for the wood include Sycamore *Acer pseudoplatanus*, Beech *Fagus sylvatica* and Cherry Laurel *Prunus laurocerasus*. These are not posing a threat at present, but in particular, any exotic species should be removed in the long-term from the wet woodland NNR. Presence of such species elsewhere in the site should be monitored and removal considered following consideration of other potential nature conservation benefits of such species, e.g. Beech is important for ectomycorrhizal fungi and associated invertebrates.

There is a history of planting for game cover and pheasant are still being reared on site. Shrubs planted in the past for cover should be monitored and their removal considered in the long term.

Priority is in the wet woodland NNR. Any non-native species should be removed sympathetically from this area. The other broad-leaved areas are all derived from semi-natural estate woodland. Any transition from what is present now to an "idealised" semi-natural Oak wood will require an agreement of approach with Forest Service and a long-term management programme.

ACTION: As before, regular discussion with Forest Service should agree objectives here.

Drainage

Drying out is the biggest potential threat to the Nature Reserve area. Any increased drainage of this wetland would result in development of drier woodland types and consequently loss of species such as Tussock Sedge *Carex paniculata,* Greater Pond-sedge *C. riparia* and the notable Water Violet *Hottonia palustris.*

ACTION: Routine monitoring activities should observe any plant community changes due to any drainage practices. More subtle changes will be observed in quality woodland monitoring. There will be a natural, all things being equal, transition from wet wood to a drier type over time.

Pollution

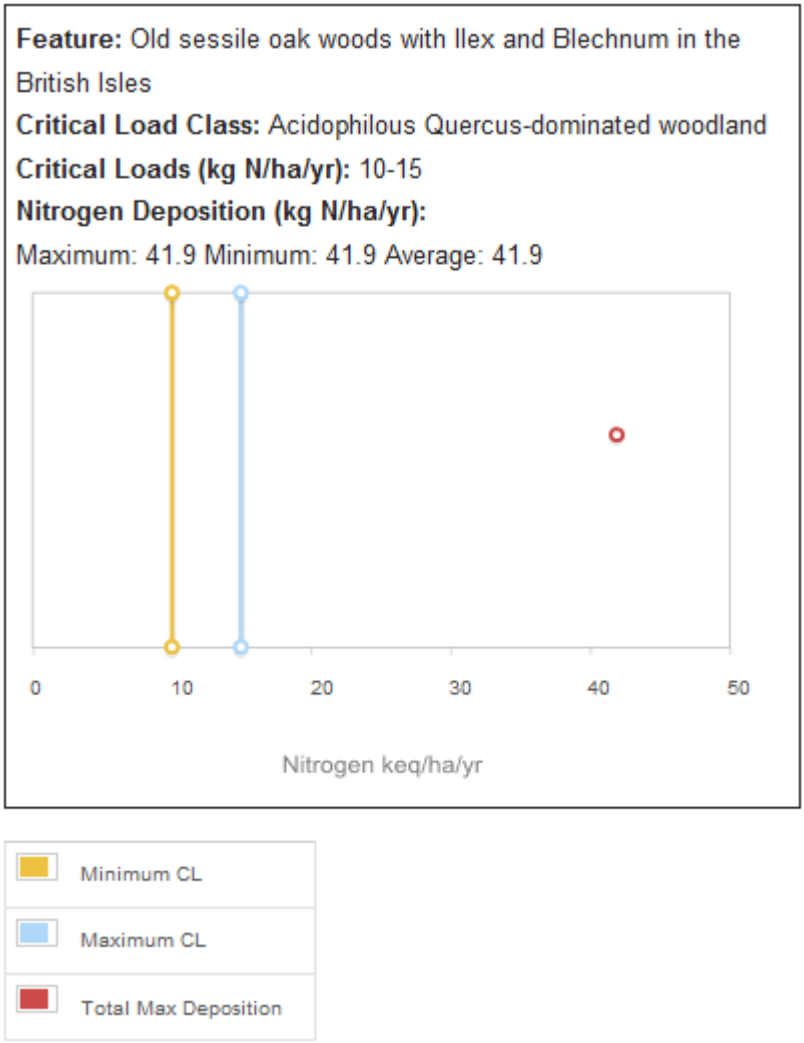
Any increase in plant nutrients, e.g. NPK in the water would lead to a shift in vegetation structure in the wetland areas.

Action: Compliance monitoring should observe any pollution of water bodies. Point sources of pollution should be investigated and rectified by the usual procedures. Vegetation monitoring within the woodland may pick up more subtle changes in pollutant levels.

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 Hollymount 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
Activities occurring outside the site (e.g. agricultural intensification, drainage works, and development) may be detrimental to the site through remote affects.
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 on 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. woodland clearance, overwintering of stock, dumping etc), or will be comparatively slow. 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 that walls and fences are still intact. Ensure that there has been no tree felling, dumping or burning carried out within the ASSI. SIM should be carried out once a year.

2. Monitor the condition of the site (Condition Assessment) –
Monitor the key attributes for each selection feature. This will detect if the features are in favourable condition or not.

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 <u>not by itself</u> 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

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European Commission (2014). Establishing conservation measures for Natura 2000 Sites.

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ANNEX 1

Feature 1 (SAC) – Alluvial forests with *Alnus glutinosa* and *Fraxinus exc*elsior (*Alno-Padion Alnion incanae, Salicion alvae*) (Status B)

* = primary attribute. One failure among primary attribute = unfavourable condition

Attribute	Targets	Method of Assessment	Comments
* Area of Wet woodland	Maintain the extent Wet woodland at 8.7ha.	Visual estimate in 10x10m plots and across the extent of the woodland using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Loss due to natural processes (e.g. wind-throw during extreme storm) is acceptable
Alder woodland community diversity	Maintain presence of the woodland community, W5 as established at base line survey.	Visual estimate in 10x10m plots	
Presence of associated features and semi-natural habitats	Maintain existing associated features and semi-natural habitats.	Visual estimate in 10x10m plots and across the extent of 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. Note: Loss of associated habitats to Wet woodland may be desirable in some instances.
* Structural variation (% cover)	Mean canopy cover greater than 50%	Estimate within the visual vicinity of the monitoring plots.	A well structured wood should have a well developed canopy and shrub layer. However, many Wet woodlands do not support a tall

	Mean shrub cover should be maintained between 15-50%	Estimate within the visual vicinity of the monitoring plots.	canopy or very mature trees.
	Maintain current levels of standard variation within reasonable limits for field, herb and moss cover.	Visual estimate in 10x10m plots.	At least the current level of structural diversity should be maintained for field cover, herb cover and moss cover. Limits to be set for each site after the baseline survey. The ground flora may appear sparse, particularly where periodic flooding leaves areas of bare mud etc. Its composition may be variable. Hydrology is difficult to assess given vagaries of climate. The regime should be allowed to revert to a natural one. Negative changes will be picked up in vegetation changes over time but more detailed recording may be necessary
		Visual estimate in 10x10m plots.	
		Visual estimate in 10x10m plots.	
	Water-filled pools and ditches (or mud) should be at least present in 50% of plots.	Visual estimate in 10x10m plots.	
* Age-class variation (DAFOR)	Young trees (5- 20cm diameter) at least occasional in 25% of plots.	Visual estimate in 10x10m plots.	Age-class structure should be appropriate to the site, its history and management; however, in general, there should be a spread of different age-classes present, including young and over-mature trees. Note, that in many cases achieving the set targets is a long term aim. However, providing the correct management practices are in place, this attribute may be recorded as Unfavourable -recovering.
	Mature trees (20 - 75cm diameter) at least frequent in 75% of plots.	Visual estimate in 10x10m plots.	
	Over-mature trees (>75cm diameter) at least present in 10% of plots.	Visual estimate in 10x10m plots.	

* Presence of standing and fallen dead wood (DAFOR)	Standing dead wood at least occasional in 50% of plots.	Visual estimate in 10x10m plots.	Dead wood is often abundant but because there tend to be fewer big trees in wet woodland the size of the fallen wood is often small. Flooding may lead to local accumulations with other areas totally lacking fallen wood.
	Fallen dead wood at least occasional in 50% of plots.	Visual estimate in 10x10m plots.	
* Presence of epiphytes and climbers (DAFOR)	Epiphytes and climbers at least occasional in 50% of plots and at least frequent in 10% of plots.	Visual estimate in 10x10m plots.	Epiphytes and climbers are an important component in all woodlands. However, in Wet woodlands, their occurrence is much more sporadic than in other woodland types.
* Presence of Epiphytic bryophytes and lichens (DAFOR)	Epiphytic bryophytes and lichens at least occasional in 70% of plots and frequent in 30% of plots.	Visual estimate in 10x10m plots.	Epiphytic bryophytes and lichens are an important component in all woodlands. However, in the extreme south east of Northern Ireland, where the climate is much warmer and drier, the generic limits may be set too high and may need amended for individual sites.
* Regeneration potential (DAFOR) Maintain current levels of native tree regeneration within reasonable limits for the current structure of	Regeneration of native seedlings.	Visual estimate in 10x10m plots.	The general aim is for the successful establishment of young stems (i.e. seedlings growing through to saplings to young trees) in gaps or on the edge of a stand at sufficient density to maintain canopy density over a 10 year period. Regeneration of some native species is likely to be slow and sporadic; in some stands, there may currently not be sufficient and/or
	Regeneration of native saplings.	Visual estimate in 10x10m plots.	

the Wet Woodland.			extensive enough gaps for young trees to regenerate. This does not necessarily indicate unfavourable condition.
* Cover of non-native species (all layers) (presence/absence)	Non–native invasive canopy species should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	The canopy of the Wet Woodland should be largely comprised of Alder and Willow trees with associated native species. Non-native species are undesirable in the canopy, particularly invasive species such as Sycamore. In addition, non-native invasive species in any one layer is un-desirable. Note that non-invasive species are not viewed as a significant threat, and a low level of occurrence may be acceptable.
	Non–native invasive shrub species should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	
	Non-native invasive canopy species seedlings/saplings should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	
	Non–native invasive ground flora species should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	
* Frequency and cover of eutrophication indicators: (DAFOR)	No one negative species no more than occasional throughout the wood and/or singly or together comprising more than 5% cover. *Galium aparine, Urtica dioica, Heracleum spp, Epilobium spp. Rumex obtusifolius*	Visual estimate in 10x10m plots.	

	No more than occasional is equivalent to less than 40% occurrence in recorded plots.		
* Cover of grasses (non-woodland species) (% cover)	The mean cover of grass for the wood should be less than 10%.	Visual estimate in 10x10m plots.	A high cover of grasses indicates past and/or present grazing. Where heavy grazing has been a past management practice, the natural woodland ground flora will take a considerable time to re-establish (time limits for restoration currently unknown). However, providing the grazing pressure has been addressed, and there is evidence that woodland flora is beginning to re-appear, this attribute may be recorded as unfavourable, recovering.
* Grazing (DAFOR)	Grazing should be recorded as no more than occasional over 80% of plots.	Estimate within the visual vicinity of the monitoring plots.	Grazing by domestic stock, where it occurs should be light resulting in minimal damage to the ground flora through poaching and damage to seedlings and saplings.
* Poaching by cattle (DAFOR)	Poaching should be absent, or recorded in less than 20% of plots and frequent or more in less than 10 % of plots.	Visual estimate in 10x10m plots.	
* Frequency of recent goat damage (1-2 years) (DAFOR)	Recent goat damage should be absent, or recorded in less than 20% of plots.	Visual estimate in 10x10m plots.	

* Frequency of damage to seedlings/saplings (DAFOR)	Damage to seedling/saplings should be absent, or recorded in less than 20% of plots.	Visual estimate in 10x10m plots.	
Frequency of felling/coppicing (within 6 year monitoring cycle) (DAFOR)	There should be no felling or coppicing of native trees or shrubs.	Visual estimate in 10x10m plots and across the extent of the ASSI using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Felling non-native species as part of management for conservation is acceptable.
Maintain the diversity of woodland species throughout the wood.	Record the % of plots with each of the wet woodland indicators (W5 community) listed below:- *Filipendula ulmaria,* *Galium palustris,* *Caltha palustris,* *Cardamine pratensis,* *Lysimachia. nummularia,* *Ranunculus repens,* *Mentha aquatica,* *Angelica sylvestris,* *Potentilla palustris,* *Lythrum salicaria,* *Myosotis scorpioides,* *Oenanthe crocata,* *Lycopus europaeus,* *Angelica sylvestris,*	Visual estimate in 10x10m plots.	

	Scutellata, *Solanum dulcamara,* *Valeriana officinalis* *Iris pseudacorus,* *Equisetum fluviatile,* *Phragmites australis,* *Carex rostrata,* *C. paniculata,* *C. remota,* *C. vesicaria*.		
Indicators of Local Distinctiveness			
Presence of rare or scarce species specific to the site. *Carex riparia*	Maintain current levels of standard variation within reasonable limits for rare and notable species. If these species are not recorded on any one visit, it does not automatically make the site unfavourable.	Name the species at least present along the length of the Condition Assessment structured walk.	

Frequency -
1-20% = Rare
21-40% = Occasional
41- 60% = Frequent
> 60% = Constant

ANNEX 1

Feature 2 (SAC) - Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles (Status C)

* = primary attribute. One failure among primary attribute = unfavourable condition

Attribute	Targets	Method of Assessment	Comments
* Area of Oakwood	Maintain the extent of Oakwood at 20ha.	Visual estimate in 10x10m plots and across the extent of the woodland using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Loss due to natural processes (e.g. wind-throw during extreme storm) is acceptable.
Oakwood community diversity	Maintain presence of woodland communities, W11, W17, W9 & W7 as established at base line survey.	Visual estimate in 10x10m plots	
Presence of associated features and semi-natural habitats	Maintain existing associated features and semi-natural habitats (wet/bog woodland, wet heath, semi-natural grasslands etc.)	Visual estimate in 10x10m plots and across the extent of the ASSI using a combination of aerial photographs, SIM and Condition Assessment	Repeat monitoring of plots using GPS should indicate whether mosaics and associated habitats have changed or been lost. Note: Loss of associated habitats to Oakwood may be desirable in some instances.

		structured walk.	
* Structural variation (% cover)	Mean canopy cover greater than 70%	Estimate within the visual vicinity of the monitoring plots.	A well structured wood should have a well developed canopy and shrub layer.
	Mean shrub cover should be maintained between 20 - 50%	Estimate within the visual vicinity of the monitoring plots.	
	Maintain current levels of standard variation within reasonable limits for field, herb and moss cover. Where present assess cover of *Luzula sylvatica*.	Visual estimate in 10x10m plots.	At least the current level of structural diversity should be maintained for field cover, herb cover and moss cover. Limits to be set for each site after the baseline survey. Note: *L. sylvatica* may be dominant in many W11 oakwood communities. The percentage cover of this species may affect Oak regeneration, but more information is required before that assumption can be made.
		Visual estimate in 10x10m plots.	
		Visual estimate in 10x10m plots.	
		Visual estimate in 10x10m plots.	
	Mean cover of bare ground should be less than 5% Bare ground does not include boulders or rocks.	Visual estimate in 10x10m plots.	
* Age-class variation (DAFOR)	Young trees (5- 20cm diameter) at least occasional in 25% of plots	Estimate within the visual vicinity of the monitoring plots.	Age-class structure should be appropriate to the site, its history and management; however, in general, there should be a spread of different age-classes present, including young and over-mature trees. However, on very steep sided slopes with shallow soils, over-mature trees are
	Mature trees (20 - 75cm diameter) at least frequent in	Estimate within the visual vicinity of the	

	75% of plots	monitoring plots.	unlikely to occur as larger trees are likely to fall over before becoming over –mature. Note, that in many cases achieving the set targets is a long term aim. However, providing the correct management practices are in place, this attribute may be recorded as Unfavourable - recovering.
	Over-mature trees (>75cm diameter) at least present in 10% of plots	Estimate within the visual vicinity of the monitoring plots.	
* Presence of standing and fallen dead wood (DAFOR)	Standing dead wood at least occasional in 70% of plots and at least frequent in 30% of plots.	Visual estimate in 10x10m plots.	
	Fallen dead wood at least occasional in 70% of plots and at least frequent in 30% of plots.	Visual estimate in 10x10m plots.	
* Presence of epiphytes and climbers (DAFOR)	Epiphytes and climbers at least occasional in 70% of plots and at least frequent in 30% of plots.	Visual estimate in 10x10m plots.	Epiphytes and climbers are an important component in all woodlands. However, in the extreme south east of Northern Ireland, where the climate is much warmer and drier, the generic limits may be set too high and may need amended for individual sites.
* Presence of epiphytic bryophytes and lichens (DAFOR)	Epiphytic bryophytes and lichens at least occasional in 70% of plots and frequent in 30% of plots.	Visual estimate in 10x10m plots.	Epiphytic bryophytes and lichens are an important component in all woodlands. However, in the extreme south east of Northern Ireland, where the climate is much warmer and drier, the generic limits may be set too high and may need amended for individual sites.

* Regeneration potential (DAFOR) Maintain current levels of native tree regeneration within reasonable limits for the current structure of the Oak woodland.	Regeneration of Oak seedlings.	Visual estimate in 10x10m plots.	The general aim is for the successful establishment of young stems (i.e. seedlings growing through to saplings to young trees) in gaps or on the edge of a stand at sufficient density to maintain canopy density over a 10 year period. Regeneration of Oak in particular is likely to be slow and sporadic; in some stands, there may currently not be sufficient and/or extensive enough gaps in the canopy for oak to regenerate. This does not necessarily indicate unfavourable condition.
	Regeneration of Oak saplings	Visual estimate in 10x10m plots.	
	Regeneration of other native seedlings.	Visual estimate in 10x10m plots.	
	Regeneration of other native saplings.	Visual estimate in 10x10m plots.	
* Cover of non-native species (all layers) (presence/absence)	Non–native invasive canopy species should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	The canopy of the Oak woodland should be largely comprised of Oak trees. Non-native species are undesirable in the canopy, particularly invasive species such as Sycamore. In addition, non-native invasive species in any one layer is un-desirable. Note that non-invasive species are not viewed as a significant threat, and a low level of occurrence may be acceptable.
	Non–native invasive shrub species should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	
	Non-native invasive canopy species seedlings/saplings should be present in less than 20% of plots, but never frequent.	Visual estimate in 10x10m plots.	
	Non–native invasive ground flora species should be present in less	Visual estimate in 10x10m plots.	

	than 20% of plots, but never frequent.		
*Frequency and cover of eutrophication indicators: (DAFOR)	No one negative species no more than occasional throughout the wood and/or singly or together comprising more than 5% cover. *Galium aparine, Urtica dioica, Heracleum spp, Epilobium spp. Rumex obtusifolius* No more than occasional is equivalent to less than 40% occurrence in recorded plots.	Visual estimate in 10x10m plots.	
* Cover of *Pteridium* (% cover)	The mean cover of *Pteridium* for the wood should be less than 10%.	Visual estimate in 10x10m plots.	
* Cover of grasses (non-woodland species) (% cover)	The mean cover of grass for the wood should be less than 10%.	Visual estimate in 10x10m plots.	A high cover of grasses indicates past and/or present grazing. Where heavy grazing has been a past management practice, the natural woodland ground flora will take a considerable time to re-establish (time limits for restoration currently unknown). However, providing the grazing pressure has been addressed, and there is evidence that woodland flora is beginning to re-appear, this attribute may be recorded as unfavourable, recovering.

Management /Disturbance			
* Grazing (DAFOR)	Grazing should be recorded as no more than occasional over 80% of plots.	Estimate within the visual vicinity of the monitoring plots.	Grazing by domestic stock, where it occurs should be light resulting in minimal damage to the ground flora through poaching and damage to seedlings and saplings.
* Poaching by cattle (DAFOR)	Poaching should be absent, or recorded in less than 20% of plots and frequent in less than 10% of plots.	Visual estimate in 10x10m plots.	
*Frequency of recent goat damage (1-2 years) (DAFOR)	Recent goat damage should be absent, or recorded in less than 20% of plots.	Visual estimate in 10x10m plots.	
*Frequency of damage to seedlings/saplings (DAFOR)	Damage to seedling/saplings should be absent, or recorded in less than 20% of plots.	Visual estimate in 10x10m plots.	
Frequency of felling/coppicing (within 6 year monitoring cycle) (DAFOR)	There should be no felling or coppicing of native trees or shrubs.	Visual estimate in 10x10m plots and across the extent of the ASSI using a combination of aerial photographs, SIM and Condition Assessment structured walk.	Felling non-native species as part of management for conservation is acceptable.

Maintain the diversity of woodland species throughout the wood.	Record the % of plots with each of the acid woodland indicators (W11 & W17 communities) listed below:- *Vaccinium myrtillus,* *Blechnum spicant,* *Dicranum spp.,* *Luzula pilosa,* *Rhytidiadelphus loreus*	Visual estimate in 10x10m plots.	Within any Oak woodland, there may be pockets of base-rich woodland and or flushed woodland within the boundaries of the SAC. The diversity of these woodland communities should be maintained. However, the W11 & W17 communities should dominate the woodland.
Maintain the diversity of woodland species throughout the wood.	Record the % of plots with each of the base-rich woodland indicators (W9 community) listed below:- *Sanicla europea,* *Geum urbanum,* *Polystichum setiferum,* *Aneomne nemorosa,* *Primula vulgaris.*	Visual estimate in 10x10m plots.	Within any Oak woodland, there may be pockets of base-rich woodland and or flushed woodland within the boundaries of the SAC. The diversity of these woodland communities should be maintained.
Maintain the diversity of woodland species throughout the wood.	Record the % of plots with each of the flushed woodland indicators (W7 community) listed below:- *Carex remota,* *Ranunculus repens,* *Chrysosplenium oppositifolium,* *Filipendula ulmaria,* *Lysimachia nemorum.*	Visual estimate in 10x10m plots.	Within any Oak woodland, there may be pockets of base-rich woodland and or flushed woodland within the boundaries of the SAC. The diversity of these woodland communities should be maintained.

Presence of rare or scarce species specific to the site.	Maintain current levels of standard variation within reasonable limits for rare and notable species. If these species are not recorded on any one visit, it does not automatically make the site unfavourable.	Name the species at least present along the length of the Condition Assessment structured walk.	

Frequency -
1-20% = Rare
21-40% = Occasional
41- 60% = Frequent
> 60% = Constant